STR-DA4ES/DA7ES/VA333ES

SERVICE MANUAL

SONY-10071

Ver 1.0 2002. 07

US Model
Canadian Model
STR-DA4ES/DA7ES
AEP Model
E Model
STR-VA333ES

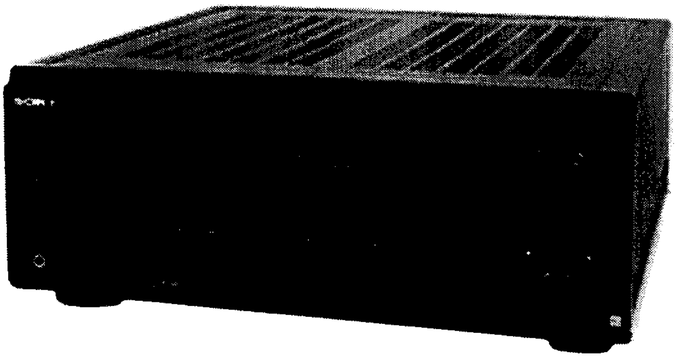

Photo: STR-VA333ES

This receiver incorporates Dolby* Digital and Pro Logic Surround and the DTS** Digital Surround System.
* Manufactured under license from Dolby Laboratories.
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** "DTS", "DTS-ES Extended Surround" and "Neo: 6" are trademarks of Digital Theater Systems, Inc.

SPECIFICATIONS

STR-DA4ES/DA7ES AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 20 – 20,000 Hz; rated DA4ES: 110, DA7ES: 120 watts per channel minimum RMS power, with no more than 0.05 % total harmonic distortion from 250 milliwatts to rated output.

AMPLIFIER SECTION

POWER OUTPUT

Rated Power Output at Stereo Mode

(8 ohms 20 Hz – 20 kHz, THD 0.05 %)
STR-DA7ES: 120 W + 120 W
STR-DA4ES: 110 W + 110 W
(4 ohms 20 Hz – 20 kHz, THD 0.09 %)
STR-DA7ES: 100 W + 100 W
STR-DA4ES: 90 W + 90 W

Reference Power Output

(8 ohms 20 Hz – 20 kHz, THD 0.05 %)
STR-DA7ES: FRONT 1) : 120 W + 120 W
CENTER 1) : 120 W
SURR 1) : 120 W + 120 W
SURR BACK 1) : 120 W + 120 W
STR-DA4ES: FRONT 1) : 110 W + 110 W
CENTER 1) : 110 W
SURR 1) : 110 W + 110 W
SURR BACK 1) : 110 W + 110 W
(4 ohms 20 Hz – 20 kHz, THD 0.09 %)
STR-DA7ES: FRONT 1) : 100 W + 100 W
CENTER 1) : 100 W
SURR 1) : 100 W + 100 W
SURR BACK 1) : 100 W + 100 W
STR-DA4ES: FRONT 1) : 90 W + 90 W
CENTER 1) : 90 W
SURR 1) : 90 W + 90 W
SURR BACK 1) : 90 W + 90W

1) Depending on the sound field settings and the source, there may be no sound output.

– Continued on next page –

FM STEREO FM-AM RECEIVER

9-874-082-01
2002G0400-1
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Home Audio Company
Published by Sony Engineering Corporation

SONY®

Frequency response

PHONO	RIAA equalization curve ±0.5 dB
CD/SACD, TAPE, MD/DAT, TV/SAT, DVD/LD, VIDEO 1, 2, 3	10 Hz – 100 kHz +0.5/–2 dB (with sound field, equalizer, and bass boost bypassed)

Inputs (Analog)

PHONO	Sensitivity: 2.5 mV Impedance: 50 kilohms S/N [2] : 86 dB (A, 2.5 mV [3])
MULTI CHANNEL IN 1, 2, CD/SACD, TAPE, MD/DAT, DVD/LD, TV/SAT, VIDEO 1, 2, 3	Sensitivity: 150 mV Impedance: 50 kilohms S/N [2] : 100 dB (A, 150 mV [3])

2) INPUT SHORT.
3) Weighted network, input level.

Inputs (Digital)

CD/SACD, DVD/LD (Coaxial)	Sensitivity: – Impedance: 75 ohms S/N: 100 dB (A, 20 kHz LPF)
CD/SACD, DVD/LD, TV/SAT, MD/DAT (Optical)	Sensitivity: – Impedance: – S/N: 100 dB (A, 20 kHz LPF)

Outputs

TAPE, MD/DAT (REC OUT), VIDEO 1, 2 (AUDIO OUT)	Voltage: 150 mV Impedance: 10 kilohms
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUB WOOFER	Voltage: 2 V Impedance: 1 kilohms

EQ

BASS:	99 Hz~1.0 kHz (21 steps)
MID (FRONT L/R, CENTER only):	198 Hz~10 kHz (36 steps)
TREBLE:	1.0 kHz~10 kHz (23 steps)
Gain levels:	±10 dB, 0.5 dB step

FM TUNER SECTION

Tuning range	87.5 - 108.0 MHz
Antenna terminals	75 ohms, unbalanced
Sensitivity	
Mono:	18.3 dBf, 2.2 µV/75 ohms
Stereo:	38.3 dBf, 22.5 µV/75 ohms
Usable sensitivity	11.2 dBf, 1 µV/75 ohms
S/N	
Mono:	76 dB
Stereo:	70 dB
Harmonic distortion at 1 kHz	
Mono:	0.3%
Stereo:	0.5%
Separation	45 dB at 1 kHz
Frequency response	30 Hz – 15 kHz, +0.5/–2 dB
Selectivity	60 dB at 400 kHz

AM TUNER SECTION

Tuning range	
With 10-kHz tuning scale:	530 – 1710 kHz [4]
With 9-kHz tuning scale:	531 – 1710 kHz [4]
Antenna	Loop antenna
Usable sensitivity	50 dB/m (at 1,000 kHz or 999 kHz)
S/N	54 dB (at 50 mV/m)
Harmonic distortion	0.5 % (50 mV/m, 400 kHz)
Selectivity	
At 9 kHz:	35 dB
At 10 kHz:	40 dB

4) You can change the AM tuning scale to 9 kHz or 10 kHz. After tuning in any AM station, turn off the receiver. Hold down TUNING + and press I/⏻ . All preset stations will be erased when you change the tuning scale. To reset the scale to 10 kHz (or 9 kHz), repeat the procedure.

VIDEO SECTION

Inputs/Output

Video:	1 Vp-p, 75 ohms
S-video:	Y: 1 Vp-p, 75 ohms C: 0.286 Vp-p, 75 ohms
COMPONENT VIDEO:	Y: 1 Vp-p, 75 ohms B-Y: 0.7 Vp-p, 75 ohms R-Y: 0.7 Vp-p, 75 ohms

REMOTE CONTROL RM-US105A (STR-DA7ES only)

Remote control system	Infrared control
Power requirements	3 V DC with two R6 (size-AA) batteries
Dimensions	210 × 45 × 25 mm
Mass (approx.)	95 g excluding batteries

GENERAL

Power requirements	120 V AC, 60 Hz
Power consumption	
Models of area code U	
STR-DA7ES:	450 W
STR-DA4ES:	420 W
Models of area code CA	
STR-DA7ES:	490 VA
STR-DA4ES:	470 VA
Power consumption (during standby mode)	1 W
AC outlets	2 switched, 120 W/1A
Dimensions	430 × 174 × 465 mm including projecting parts and controls
Mass (Approx.)	
STR-DA7ES:	21.0 kg
STR-DA4ES:	21.0 kg

Supplied accessories

FM wire antenna (1)
AM loop antenna (1)
Audio/video/control S cord (1)
Control S cord (mini jack) (1)
STR-DA7ES only;
  Remote commander RM-TP1 (1)
  Base unit RMB-TP1 (1 for RM-TP1)
  AC adapter (1 for RM-TP1)
  Remote commander RM-US105A (1)
  R6 (size-AA) batteries (2)
STR-DA4ES only;
  Remote commander RM-LP211 (1)
  LR6 (size-AA) batteries (3)

Design and specifications are subject to change without notice.

STR-VA333ES
AMPLIFIER SECTION

Models of area code TW:

Power Output

(8 ohms 20 Hz – 20 kHz, THD 0.05 %)
100 W + 100 W
(4 ohms 20 Hz – 20 kHz, THD 0.09 %)
90 W + 90 W

Reference Power Output

(8 ohms 20 Hz – 20 kHz, THD 0.05 %)
FRONT[1]: 100 W + 100 W
CENTER[1]: 100 W
SURR[1]: 100 W + 100 W
SURR BACK[1]: 100 W + 100 W
(4 ohms 20 Hz – 20 kHz, THD 0.09 %)
FRONT[1]: 90 W + 90 W
CENTER[1]: 90 W
SURR[1]: 90 W + 90 W
SURR BACK[1]: 90 W + 90 W

[1] Depending on the sound field settings and the source, there may be no sound output.

Models of area code CEL, KR:

Power Output

(8 ohms 1 kHz, THD 0.7 %)
100 W + 100 W[2]
90 W + 90 W[3]
(4 ohms 1 kHz, THD 0.7 %)
90 W + 90 W[2]
80 W + 80 W[3]

Reference Power Output

(8 ohms 1 kHz, THD 0.7 %)
FRONT[4]: 100 W + 100 W
CENTER[4]: 100 W
SURR[4]: 100 W + 100 W
SURR BACK[4]: 100 W + 100 W
(4 ohms 1 kHz, THD 0.7 %)
FRONT[4]: 90 W + 90 W
CENTER[4]: 90 W
SURR[4]: 90 W + 90 W
SURR BACK[4]: 90 W + 90 W
(8 ohms 20 Hz – 20 kHz, THD 0.05 %)
FRONT[4]: 90 W + 90 W
CENTER[4]: 90 W
SURR[4]: 90 W + 90 W
SURR BACK[4]: 90 W + 90 W
(4 ohms 20 Hz – 20 kHz, THD 0.05 %)
FRONT[4]: 80 W + 80 W
CENTER[4]: 80 W
SURR[4]: 80 W + 80 W
SURR BACK[4]: 80 W + 80 W

[2] Measured under the following conditions:
Models of area code CEL: 230 V AC, 50 Hz

[3] Measured under the following conditions:
Models of area code KR: 220 V AC, 60 Hz

[4] Depending on the sound field settings and the source, there may be no sound output.

Frequency response

PHONO	RIAA equalization curve ±0.5 dB
CD/SACD, TAPE, MD/DAT, TV/SAT, DVD/LD, VIDEO 1, 2, 3	10 Hz – 100 kHz +0.5/–2 dB (with sound field, equalizer, and bass boost bypassed)

Inputs (Analog)

PHONO	Sensitivity: 2.5 mV Impedance: 50 kilohms S/N[5]: 86 dB (A, 2.5 mV[6])
MULTI CHANNEL IN 1, 2, CD/SACD, TAPE, MD/DAT, DVD/LD, TV/SAT, VIDEO 1, 2, 3	Sensitivity: 150 mV Impedance: 50 kilohms S/N[5]: 100 dB (A, 150 mV[6])

5) INPUT SHORT.

6) Weighted network, input level.

Inputs (Digital)

CD/SACD, DVD/LD (Coaxial)	Sensitivity: – Impedance: 75 ohms S/N: 100 dB (A, 20 kHz LPF)
CD/SACD, DVD/LD, TV/SAT, MD/DAT (Optical)	Sensitivity: – Impedance: – S/N: 100 dB (A, 20 kHz LPF)

Outputs

TAPE, MD/DAT (REC OUT), VIDEO 1, 2 (AUDIO OUT)	Voltage: 150 mV Impedance: 10 kilohms
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUB WOOFER	Voltage: 2 V Impedance: 1 kilohms

EQ

BASS:	99 Hz~1.0 kHz (21 steps)
MID (FRONT L/R, CENTER only):	198 Hz~10 kHz (36 steps)
TREBLE:	1.0 kHz~10 kHz (23 steps)
Gain levels:	±10 dB, 0.5 dB step

FM TUNER SECTION

Tuning range	87.5 – 108.0 MHz
Antenna terminals	75 ohms, unbalanced
Sensitivity	
Mono:	18.3 dBf, 2.2 μV/75 ohms
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Usable sensitivity	11.2 dBf, 1 μV/75 ohms
S/N	
Mono:	76 dB
Stereo:	70 dB
Harmonic distortion at 1 kHz	
Mono:	0.3%
Stereo:	0.5%
Separation	45 dB at 1 kHz
Frequency response	30 Hz – 15 kHz, +0.5/–2 dB
Selectivity	60 dB at 400 kHz

AM TUNER SECTION

Tuning range	531 – 1602 kHz
Antenna	Loop antenna
Usable sensitivity	50 dB/m (at 999 kHz)
S/N	54 dB (at 50 mV/m)
Harmonic distortion	0.5 % (50 mV/m, 400 Hz)
Selectivity	35 dB

VIDEO SECTION

Inputs/Outputs

Video:	1 Vp-p, 75 ohms
S-video:	Y: 1 Vp-p, 75 ohms C: 0.286 Vp-p, 75 ohms
COMPONENT VIDEO:	Y: 1 Vp-p, 75 ohms B-Y: 0.7 Vp-p, 75 ohms R-Y: 0.7 Vp-p, 75 ohms

GENERAL

Power requirements

Area code	Power requirements
CEL	230 V AC, 50/60 Hz
TW	110 V AC, 60 Hz
KR	220 V AC, 60 Hz

Power consumption

Area code	Power consumption
CEL, KR	390 W
TW	400 W (max. 1,000 W)

Power consumption (during standby mode)
1 W

AC outlets

Area code	AC outlets
CEL	1 switched, 100 W
TW	2 switched, 100 W

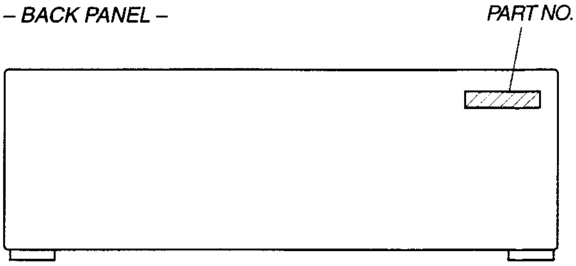
Dimensions	430 × 175 × 465 mm including projecting parts and controls
Mass (Approx.)	21.0 kg

Supplied accessories
FM wire antenna (1)
AM loop antenna (1)
Remote commander RM-LP211 (1)
LR6 (size-AA) batteries (3)

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION

– BACK PANEL –



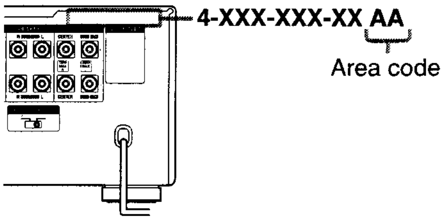
MODEL	PARTS No.
DA7ES: US model	4-240-816-0☐
DA7ES: CND model	4-240-816-1☐
DA4ES: US model	4-240-816-2☐
DA4ES: CND model	4-240-816-3☐
VA333ES: AEP model	4-240-816-4☐
VA333ES: KR model	4-240-816-5☐
VA333ES: TW model	4-240-816-6☐

- Abbreviation
  CND : Canadian model
  KR : Korea model
  TW : Taiwan model

AREA CODE

About areas codes

The area code of the receiver you purchased is shown on the lower portion of the rear panel (see the illustration below).



Any differences in operation, according to the area code, are clearly indicated in the text, for example, “Models of area code AA only”.

Fig. 1

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT
(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

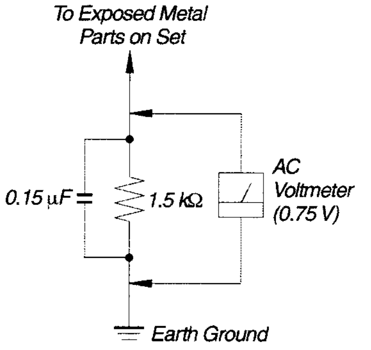


Fig. A. Using an AC voltmeter to check AC leakage.

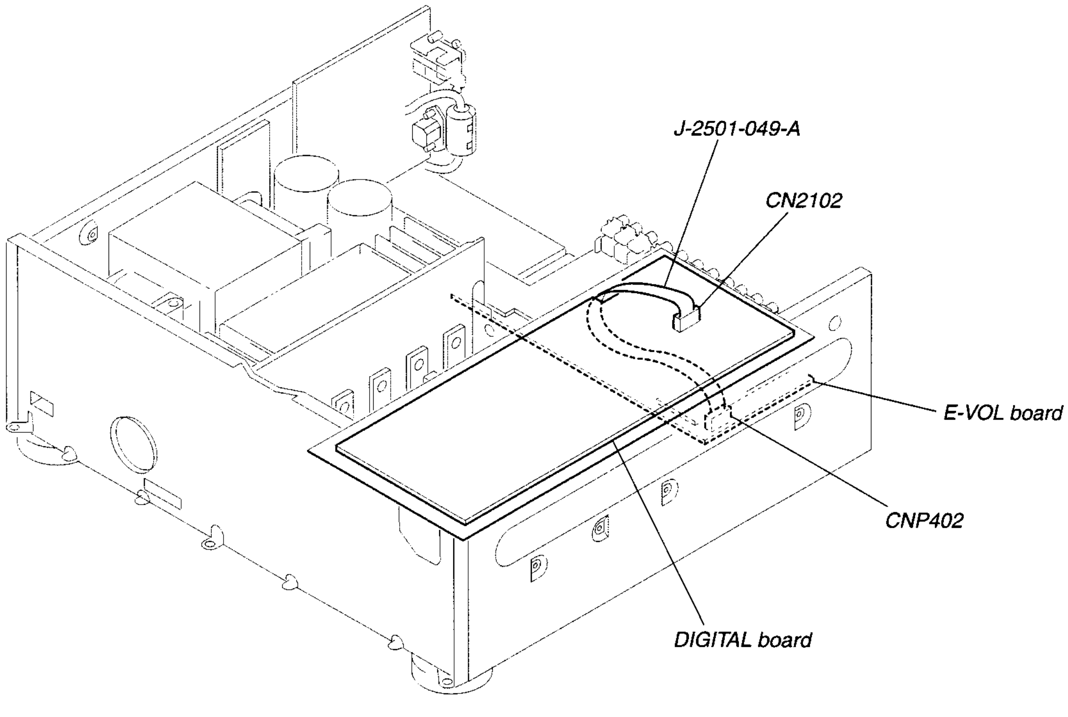
Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

EXTENSION CABLE AND SERVICE POSITION

When repairing or serving this set, connect the jig (extension cable) as shown below.

- Connect the Digital board (CN2102) and the E-Vol board (CNP402) with the extension cable (Part No. J-2501-049-A).



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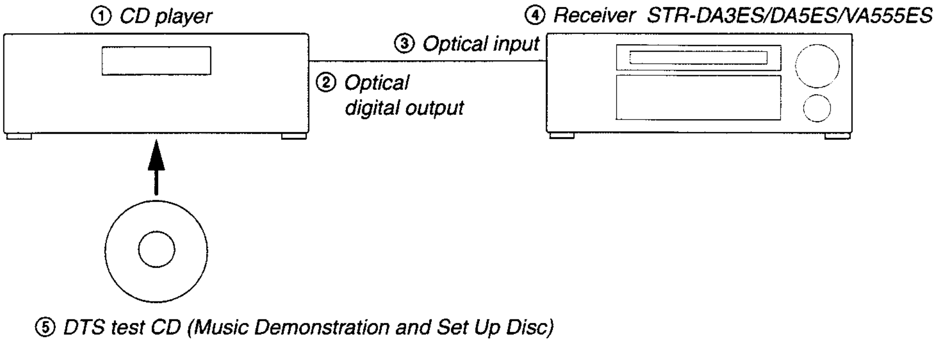
SECTION 1
SERVICE NOTE

DTS Decode Test

• Required Instrument
CD player (equipped with optical digital output)
Optical cable
DTS test CD (J-2501-154-A)

Connection:


① CD player
④ Receiver STR-DA3ES/DA5ES/VA555ES
③ Optical input
② Optical digital output
⑤ DTS test CD (Music Demonstration and Set Up Disc)

Procedure:

1. Set the FUNCTION of the receiver to the CD position and confirm that " OPTICAL " and "CD" appear on the display.

2. Insert the DTS test CD into the CD player and play the CD.

3. About three seconds later, confirm that the receiver recognizes the optical signal and that the "DTS" and "dts [3/2]" are appear on the display. Confirm also that MULTI CHANNEL DECODING (blue lamp) flashes on the front panel.

Music Demonstration

Track No.	Contents	Time
1	Seal : "Prayer for the Dying"	5'40"
2	Andrew Litton conducting The Dallas Symphony Orchestra & Chorus: Excerpt from Tchaikovsky: "1812 Overture"	4'16"
3	Alan Parsons with Christopher Cross: "So Far Away"	4'08"
4	Shoelss Joe: "The Bet"	3'29"
5	TELARC: "A Touch of Surround Madness"	6'42"

Set-Up

Track No.	Contents	Time
6	1 kHz sine (All channels) Level Adjustment and Harmonic Distortion Analysis	1'00"
7	100 Hz sine (All channels) Verification of Signal and Subwoofer Testing	1'00"
8	C-Weighted Pink Noise-Left Front Channel	1'00"
9	C-Weighted Pink Noise-Center Channel	2'00"
10	C-Weighted Pink Noise-Right Front Channel	2'00"
11	C-Weighted Pink Noise-Right Rear Channel	2'00"
12	C-Weighted Pink Noise-Left Rear Channel	2'00"
13	C-Weighted Pink Noise-Subwoofer (LEE)	2'00"
14	C-Weighted Pink Noise-All Channels	2'00"
15	10 Hz to 20 kHz Sine Sweep An "All Channel" Frequency Response Test	2'00"
16	20 Hz to 160 Hz sine sweep A "Subwoofer" Low Frequency Response Test	2'00"

* Track numbers from 8 to 14 are for Room Equalization and Channel Identification.

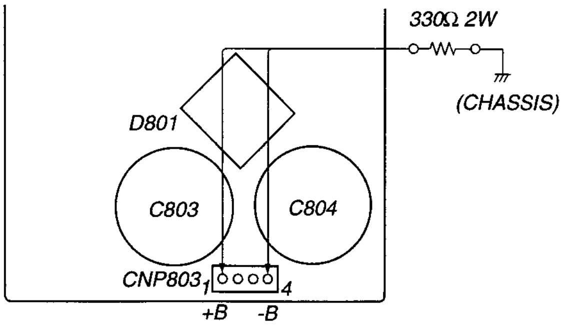
Note: Be careful about an electrical shock caused by remains of electrical potential.

The following parts on DC board have the +B or -B electrical potential.
Heat sink for rectifier diodes D801.
Aluminium case of smoothing capacitor C803, 804.

The 40-60V electrical voltage remains in C803, 804 when the power turns off.
Be sure to discharge in the following manner before servicing.

Discharging

1. Pull out the power cord from the wall outlet.
2. Connect 330 ohm 2W resistors between the heat sinks for CNP803 1pin and 4pin and chassis individually.
3. Check the electrical potential drops fully, then start servicing.



DC BOARD (COMPONENT SIDE)

SECTION 2
GENERAL

This section is extracted from instruction manual.

STR-DA4ES/DA7ES

Main unit

ALPHABETICAL ORDER

A - I

ANALOG DIRECT 19 (34)
AUDIO SPLIT 14 (41)
AUTO DEC 22 (34)
CINEMA STUDIO EX 25 (35)
Cursor buttons (</>) 38 (21, 43–47, 57, 58)
CUSTOMIZE 40 (47, 58)
Digital Cinema Sound indicator 8
DIMMER 26 (31)
DISPLAY 4 (31)
Display 6
DOOR OPEN 15
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EQ BANK 41 (45, 46)
FM/AM 24 (28)
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IR receptor 2

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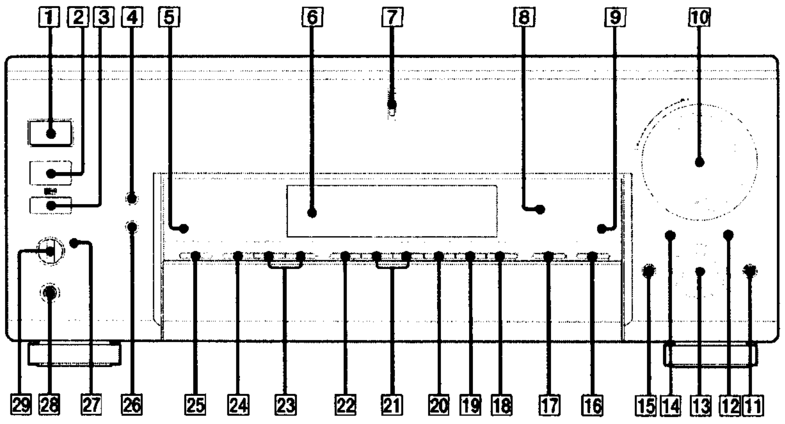
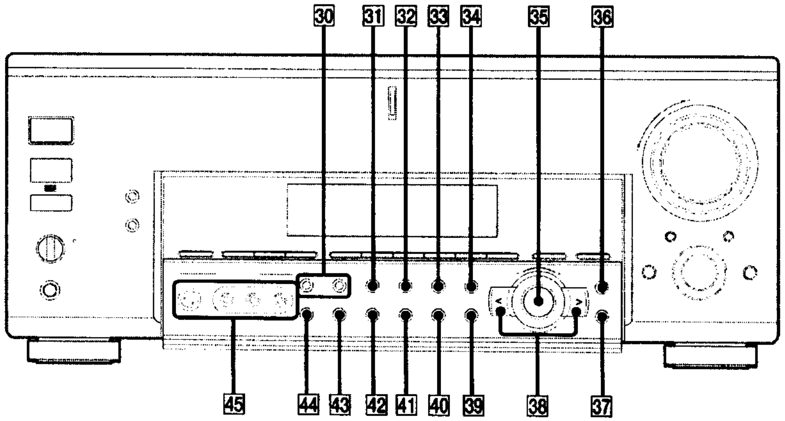
SURR BACK DECODING 16 (39)
SURROUND 33 (43)
TUNING +/– 30 (28)
VIDEO 3 INPUT jacks 45 (16)

NUMBERS AND SYMBOLS

2CH STEREO 20 (34)
2ND ROOM (STR-DA4ES only) 31 (67)
2ND ROOM indicator (STR-DA4ES only) 27
2ND/3RD ROOM (STR-DA7ES only) 31 (67)
2ND/3RD ROOM indicator (STR-DA7ES only) 27
I/⏻ (power) 1



⬇ Open the front door



STR-VA333ES

Main unit

ALPHABETICAL ORDER

A - L

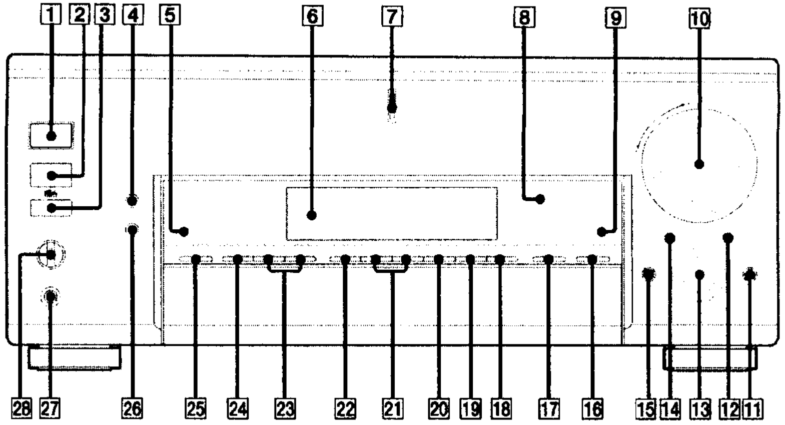
ANALOG DIRECT [19] (34)
AUDIO SPLIT [14] (41)
AUTO DEC [22] (34)
CINEMA STUDIO EX [25] (35)
Cursor buttons (</>) [37] (19, 43–47, 57)
CUSTOMIZE [39] (47, 57)
Digital Cinema Sound indicator [8]
DIMMER [26] (31)
DISPLAY [4] (29, 31)
Display [6]
DOOR OPEN [15]
ENTER [36] (46, 57)
EQ [38] (45, 46)
EQ BANK [40] (45, 46)
FM/AM [24] (26)
FM MODE [43] (26)
FUNCTION [13] (25, 26, 28, 41, 42, 57)
INPUT MODE [12] (42)
IR emitter [3]
IR receptor [2]
Jog dial [34] (19, 43–47, 57)
LEVEL [33] (44)

M - V

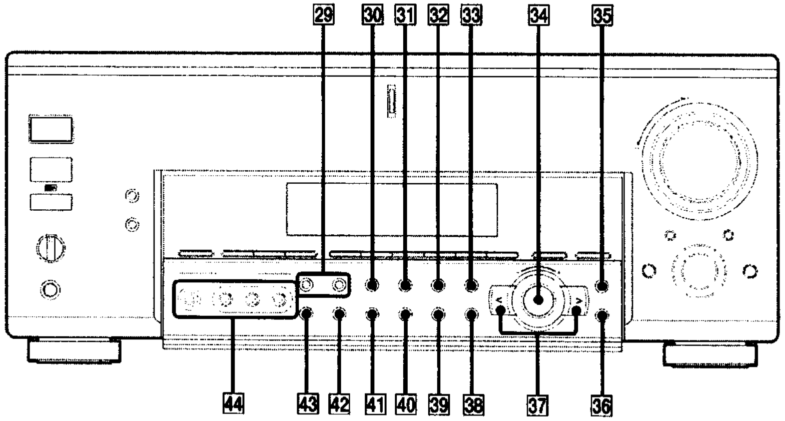
MASTER VOLUME [10] (24, 25)
MEMORY [42] (27, 28)
MODE +/– [21] (36, 37, 45)
MULTI CH DIRECT [18] (26)
MULTI CHANNEL DECODING indicator [7]
MUTING [11] (25)
NIGHT MODE [41] (38)
NIGHT MODE indicator [5]
NORMAL SURR (DDPLII/NEO:6) [17] (38)
ON SCREEN [31] (9, 12, 14)
PHONES jack [27]
PRESET TUNING +/– [23] (28)
PTY SELECT +/– [29] (29)
(Models of area code CEL only)
RDS PTY [30] (29)
(Models of area code CEL only)
SB DEC indicator [9]
SET UP [35] (19)
SLEEP [30] (58)
(Models of area code TW, KR only)
SPEAKERS switch [28] (58)
SURR BACK DECODING [16] (39)
SURROUND [32] (43)
TUNING +/– [29] (26)
VIDEO 3 INPUT jacks [44] (14)

NUMBERS AND SYMBOLS

2CH STEREO [20] (34)
I/⏻ (power) [1]



Open the front door



SECTION 3
TEST MODE

FLUORESCENT INDICATOR TUBE TEST MODE

All fluorescent segments are tested. When this test is activated, all segments turn on at the same time, then each segment turns on one after another.

Procedure:

1. While depressing, the DISPLAY and the ENTER buttons simultaneously, press the power I/⏻ button to turn on the main power.
2. All segments turn on at the same time, then each segment turns on press the DIMMER button.

FACTORY SET MODE

All preset contents are reset to the default setting.

Procedure:

Procedure:

1. While pressing SET UP and DIMMER buttons, press I/⏻ button, then "TUNER FACTORY PRESET" is displayed in several seconds and PRESET is complete.

ALL CLEAR MODE

Procedure:

1. Press I/⏻ button continuously, then "ENTER to Clear ALL" is displayed and press ENTER the preset data are cleared."

SOUND FIELD CLEAR MODE

The preset sound field is cleared when this mode is activated. Use this mode before returning the product to clients upon completion of repair.

Procedure:

1. While depressing the MODE + button, press the power I/⏻ button to turn on the main power. The message S.F Initialize appears and initialization is performed.

AM CHANNEL STEP 9 KHZ/10 KHZ SELECTION MODE
(DA4ES, DA7ES, VA333ES: E MODELS)

Either the 9 kHz step or 10 kHz step can be selected for the AM channel step.

Procedure:

1. Set the FUNCTION to AM. Turn off the main power.
2. While depressing the TUNING + button press the power I/⏻ button to turn on the main power.
3. Either the message AM 9kHz Step or AM 10kHz Step appears. Select the desired step.

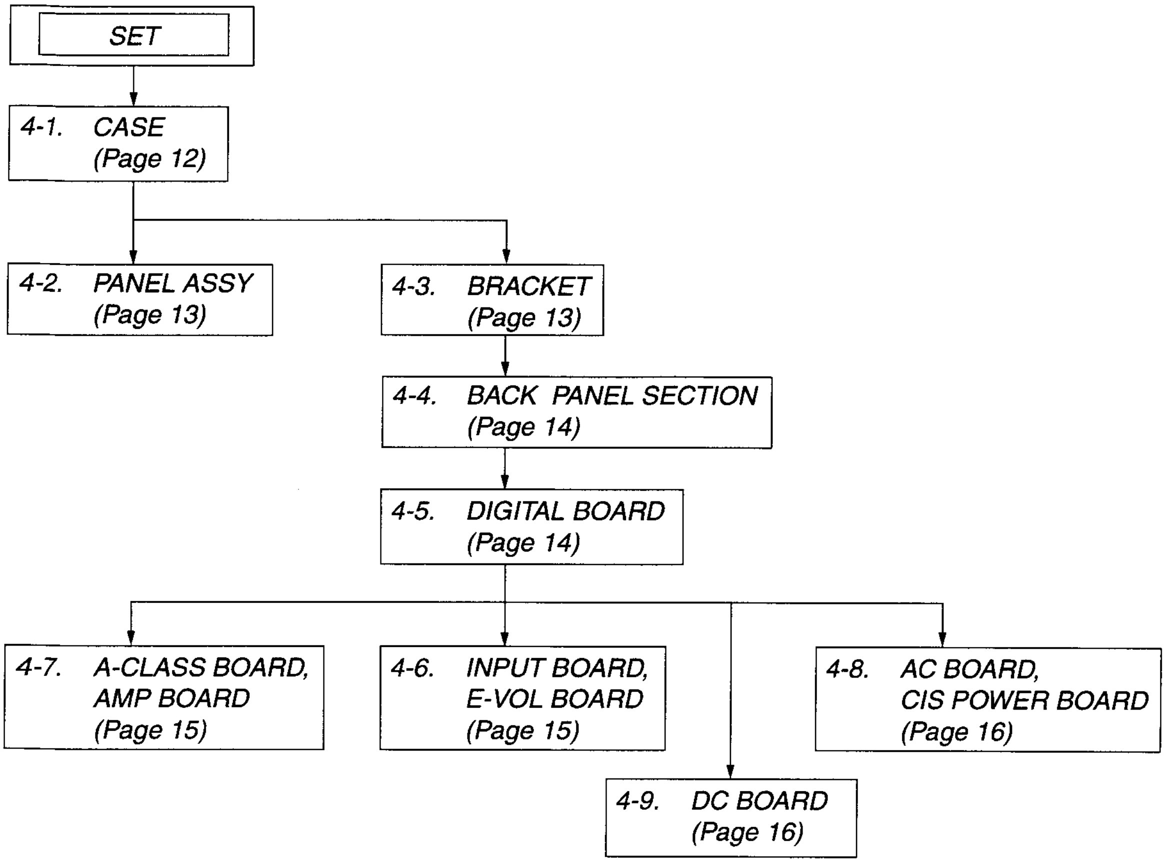
VERSION MODE

Procedure:

1. While pressing SURR and ENTER buttons, press I/⏻ button, then "MENU SPECIALIZED!" is displayed in several seconds.
2. Press > button, then "D7ES U_CA VX.XX..." is displayed in several seconds.

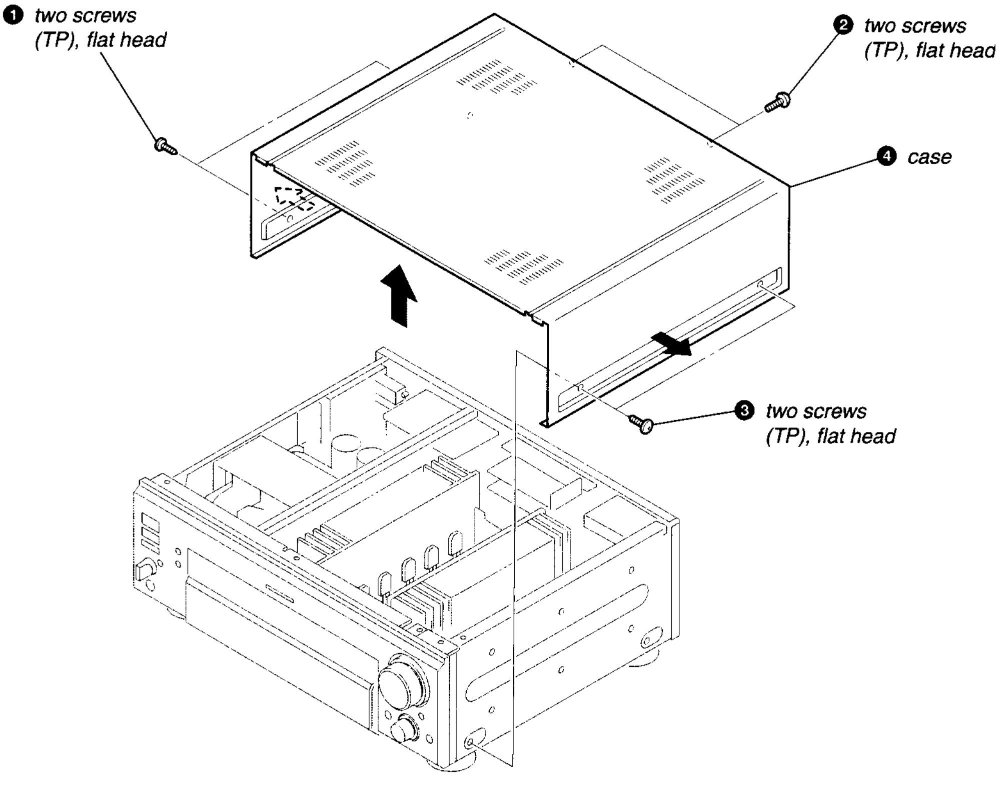
SECTION 4
DISASSEMBLY

Note: This set can be disassemble according to the following sequence.

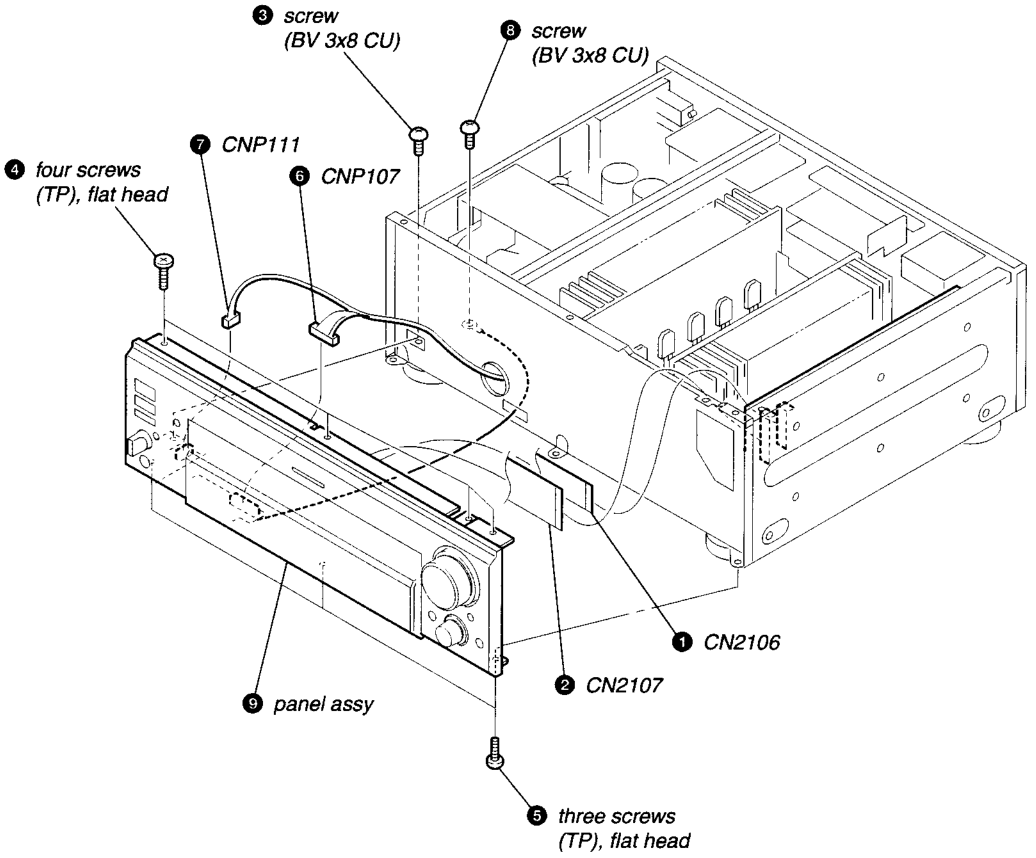

SET
4-1. CASE (Page 12)
4-2. PANEL ASSY (Page 13)
4-3. BRACKET (Page 13)
4-4. BACK PANEL SECTION (Page 14)
4-5. DIGITAL BOARD (Page 14)
4-7. A-CLASS BOARD, AMP BOARD (Page 15)
4-6. INPUT BOARD, E-VOL BOARD (Page 15)
4-8. AC BOARD, CIS POWER BOARD (Page 16)
4-9. DC BOARD (Page 16)

Note: Follow the disassembly procedure in the numerical order given.

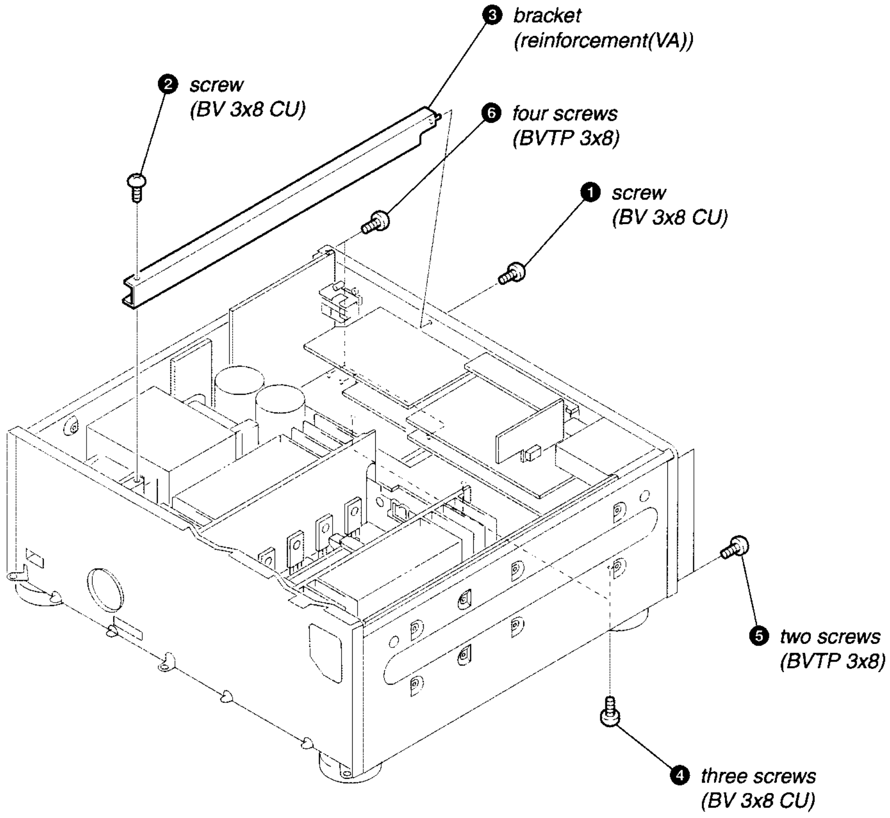
4-1. CASE


❶ two screws (TP), flat head
❷ two screws (TP), flat head
❹ case
❸ two screws (TP), flat head

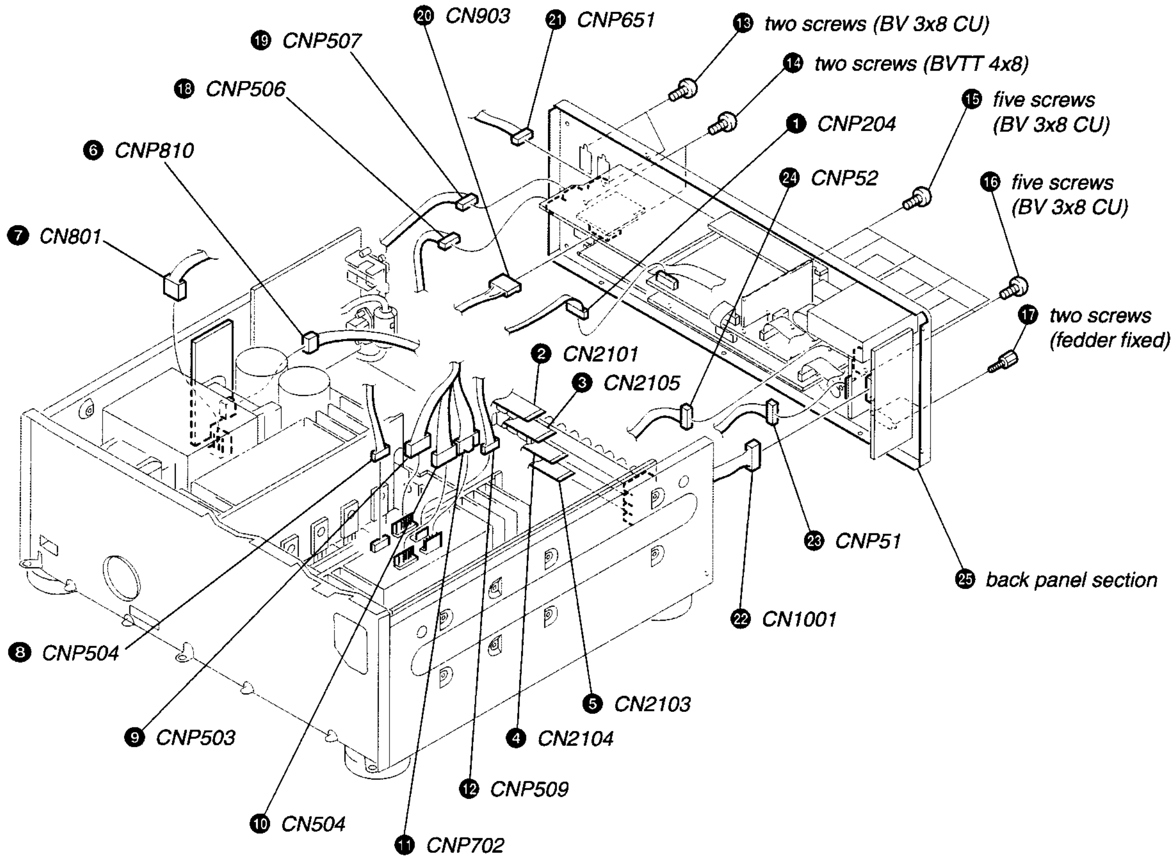
4-2. PANEL ASSY


❸ screw
(BV 3x8 CU)
❽ screw
(BV 3x8 CU)
❼ CNP111
❹ four screws
(TP), flat head
❻ CNP107
❶ CN2106
❷ CN2107
❾ panel assy
❺ three screws
(TP), flat head

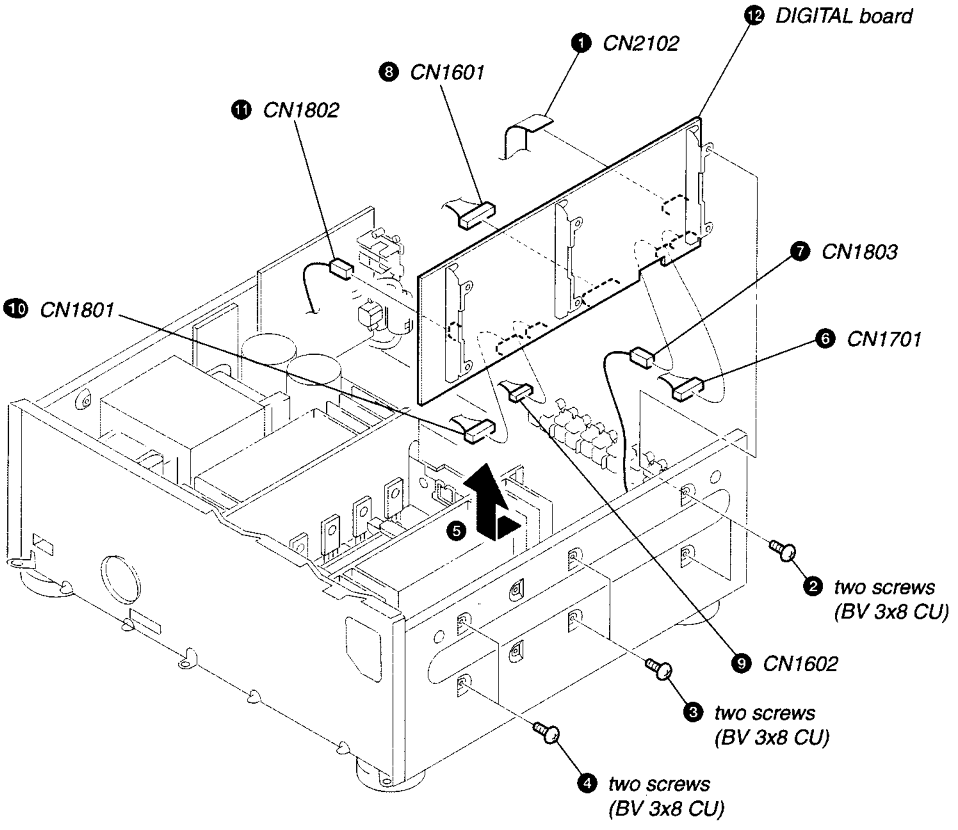
4-3. BRACKET


❸ bracket
(reinforcement(VA))
❷ screw
(BV 3x8 CU)
❻ four screws
(BVTP 3x8)
❶ screw
(BV 3x8 CU)
❺ two screws
(BVTP 3x8)
❹ three screws
(BV 3x8 CU)

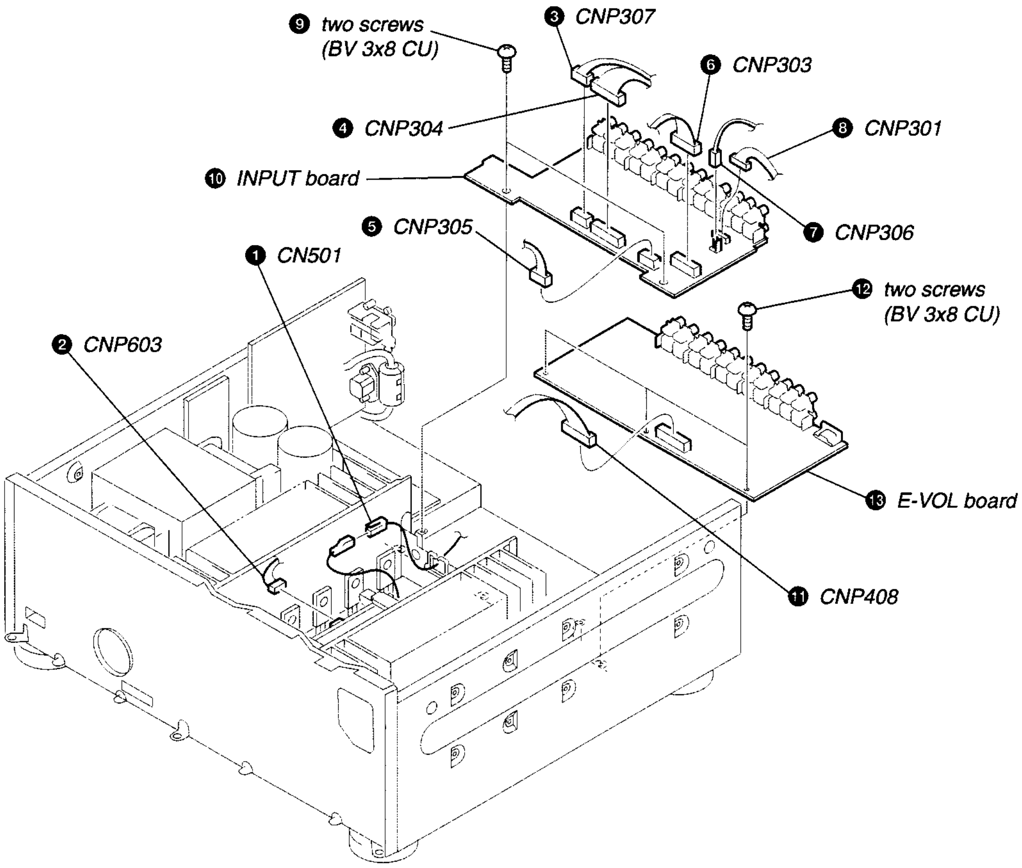
4-4. BACK PANEL SECTION


⑲ CNP507
⑳ CN903
㉑ CNP651
⑬ two screws (BV 3x8 CU)
⑭ two screws (BVTT 4x8)
⑱ CNP506
① CNP204
⑮ five screws (BV 3x8 CU)
⑥ CNP810
㉔ CNP52
⑯ five screws (BV 3x8 CU)
⑦ CN801
⑰ two screws (fedder fixed)
② CN2101
③ CN2105
㉓ CNP51
㉕ back panel section
㉒ CN1001
⑧ CNP504
⑤ CN2103
⑨ CNP503
④ CN2104
⑫ CNP509
⑩ CN504
⑪ CNP702

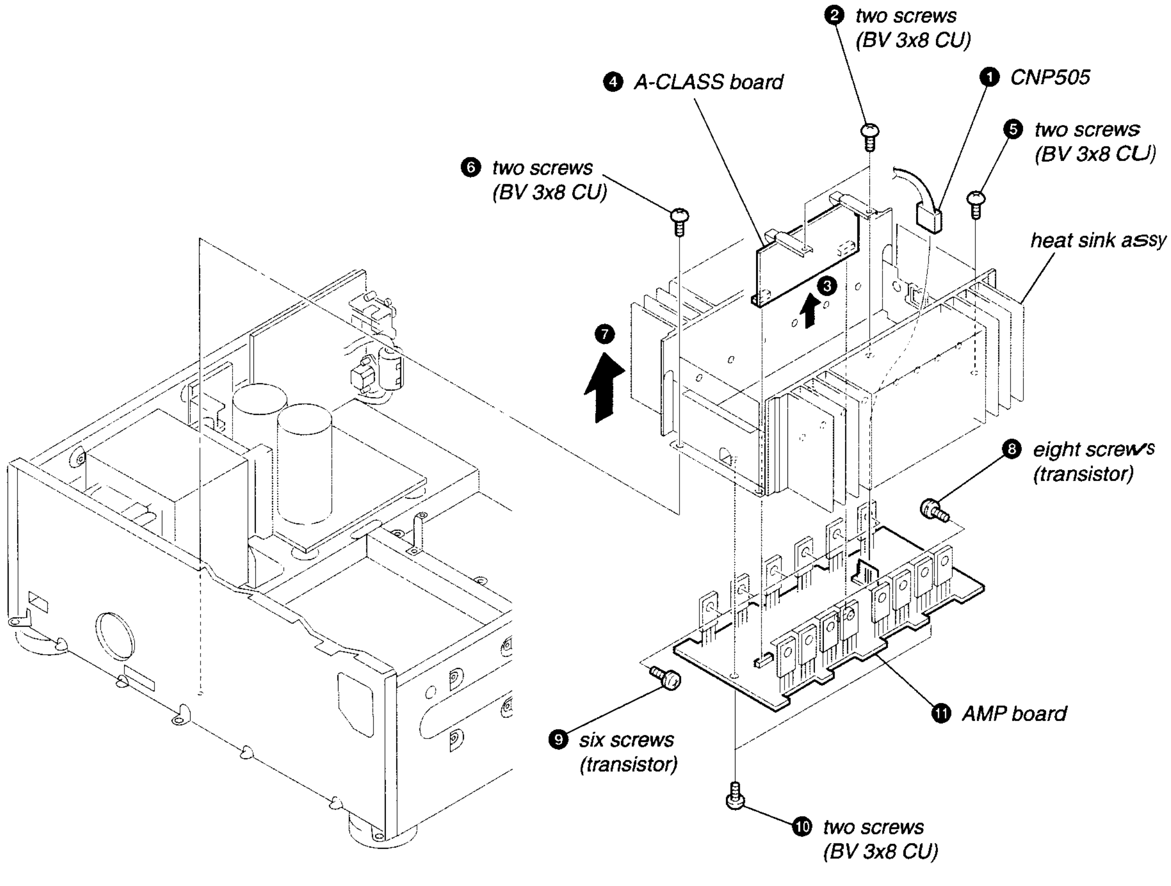
4-5. DIGITAL BOARD


⑫ DIGITAL board
① CN2102
⑧ CN1601
⑪ CN1802
⑦ CN1803
⑩ CN1801
⑥ CN1701
⑤
② two screws (BV 3x8 CU)
⑨ CN1602
③ two screws (BV 3x8 CU)
④ two screws (BV 3x8 CU)

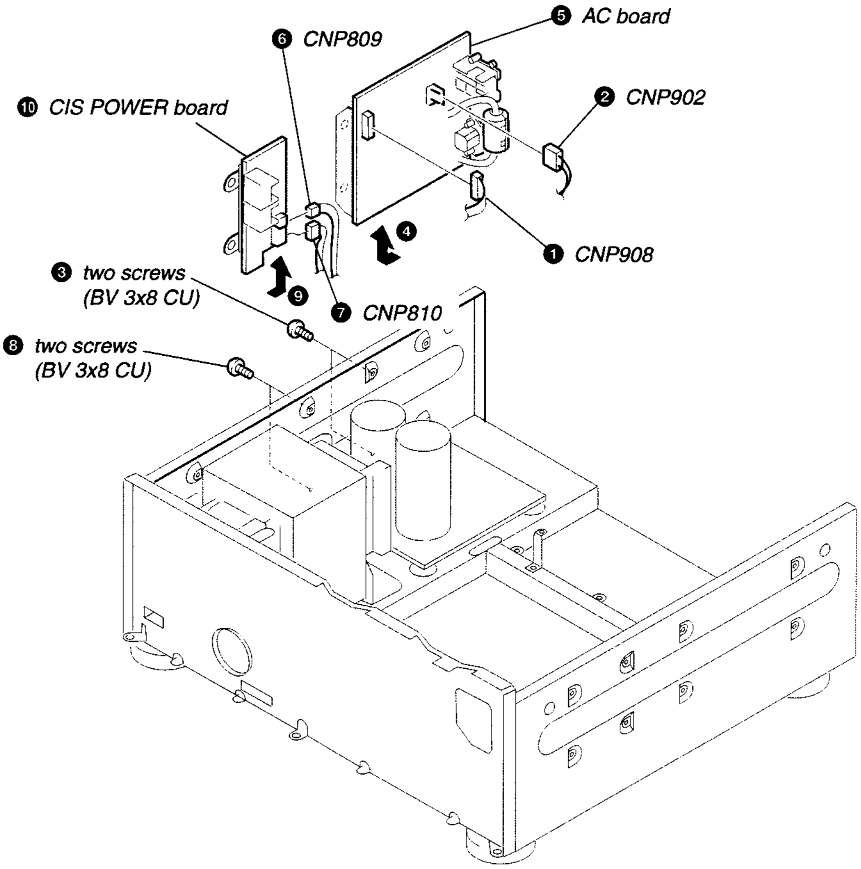
4-6. INPUT BOARD, E-VOL BOARD


❾ two screws (BV 3x8 CU)
❸ CNP307
❻ CNP303
❹ CNP304
❽ CNP301
❿ INPUT board
❼ CNP306
❺ CNP305
❶ CN501
⓬ two screws (BV 3x8 CU)
❷ CNP603
⓭ E-VOL board
⓫ CNP408

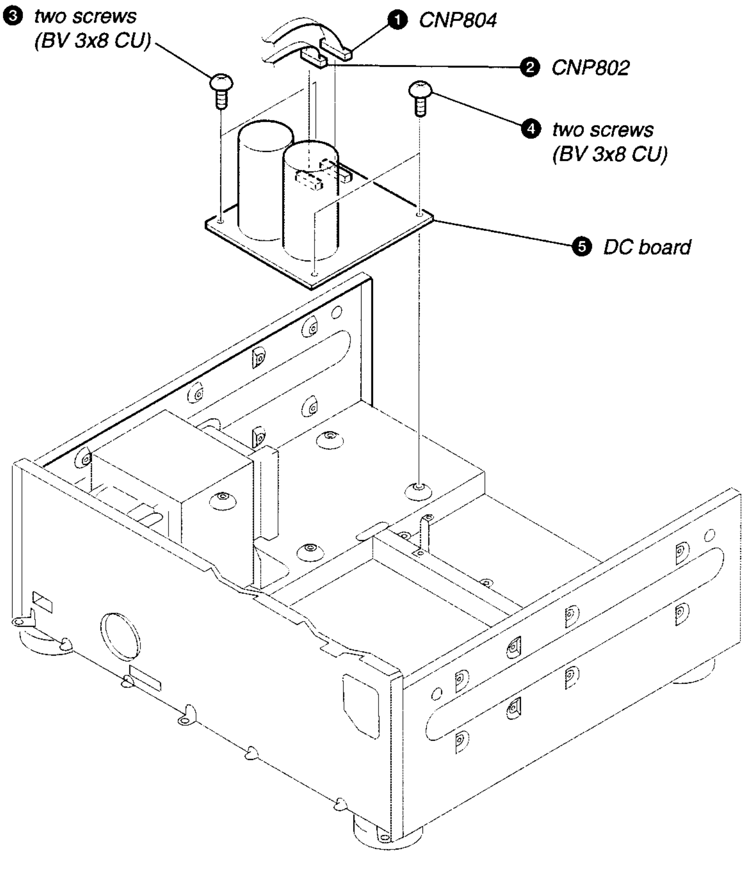
4-7. A-CLASS BOARD, AMP BOARD


❷ two screws (BV 3x8 CU)
❹ A-CLASS board
❶ CNP505
❺ two screws (BV 3x8 CU)
❻ two screws (BV 3x8 CU)
heat sink assy
❸
❼
❽ eight screws (transistor)
⓫ AMP board
❾ six screws (transistor)
❿ two screws (BV 3x8 CU)

4-8. AC BOARD, CIS POWER BOARD


❺ AC board
❻ CNP809
❿ CIS POWER board
❷ CNP902
❹
❶ CNP908
❸ two screws
(BV 3x8 CU)
❾
❼ CNP810
❽ two screws
(BV 3x8 CU)

4-9. DC BOARD


❸ two screws
(BV 3x8 CU)
❶ CNP804
❷ CNP802
❹ two screws
(BV 3x8 CU)
❺ DC board

SECTION 5
ELECTRICAL ADJUSTMENT

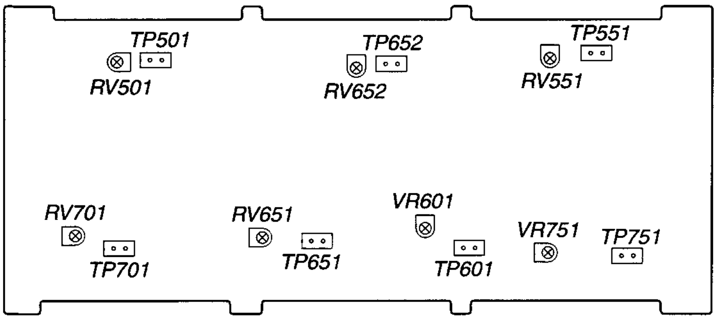
[IDLING CURRENT ADJUSTMENT]

Measuring Instrument:	Digital voltmeter
Adjustment Procedure:	Adjust the respective adjustment elements so that the voltage (absolute value) across the corresponding testpoints satisfies the specification.

Channel	Test point	Adjustment element	Specification
FRONT L	TP501	RV501	4.0mV±0.5mV
FRONT R	TP551	RV551	
CENTER	TP652	RV652	
SURROUND L	TP701	RV701	
SURROUND R	TP751	RV751	
SURR BACK L	TP651	RV651	
SURR BACK R	TP601	RV601	

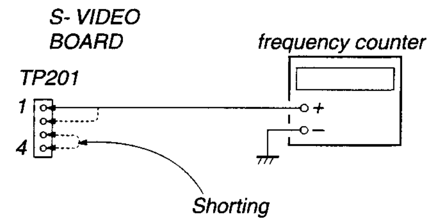
Adjustment Location:

[AMP BOARD]


TP501
RV501
TP652
RV652
TP551
RV551
RV701
TP701
RV651
TP651
VR601
TP601
VR751
TP751

[OSD ADJUSTMENT]

Measuring Instrument: frequency counter


S- VIDEO BOARD
frequency counter
TP201
1
4
+
–
Shorting

Procedure:

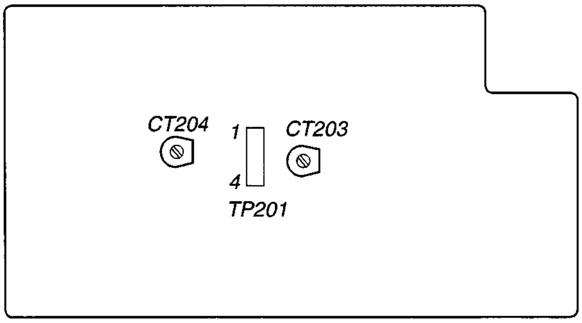
1. Connect the frequency counter to check connector (TP201) of the S VIDEO board.
2. Connect between Pin ③ to Pin ④ of TP201 by lead wire.
3. Adjust the respective adjustment element so that the frequency counter read specification.

Adj.	MODEL		Adjustment element	measurement point	Specification
I	VA333ES	NTSC	CT202 (CLOCK BOARD)	TP201 Pin ①	3.579545MHz ±50Hz
		PAL	CT201 (CLOCK BOARD)		4.433618MHz ±50Hz
	DA4ES, DA7ES		CT203 (S-VIDEO BOARD)		3.57954MHz ±50Hz
II	All models		CT204 (S-VIDEO BOARD)	TP201 Pin ②	7.20MHz ±0.01MHz

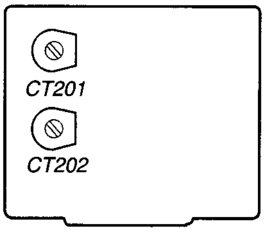
4. After check, remove the lead wire connected in step 2.

Adjustment Location:

[S-VIDEO BOARD]


CT204
1
4
CT203
TP201

[CLOCK BOARD]


CT201
CT202

SECTION 6
DIAGRAMS

6-1. IC PIN FUNCTION

• IC1201 CXD9617R (AUDIO DSP) (DIGITAL BOARD (4/7))

Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	Ground pin
2	XRST	I	Reset signal input
3	EXTIN	I	Not used. (connected to ground.) Master clock signal input
4	FS2	I	Not used. (connected to ground.)
5	VDDI	—	Power supply pin (+3.3 V)
6	FS1	I	Not used. (connected to ground.)
7	PLOCK	O	Not used. (open)
8	VSS	—	Ground pin
9	MCLK1	I	External crystal signal input (13.5 MHz)
10	VDDI	—	Power supply pin (+3.3 V)
11	VSS	—	Ground pin
12	MCLK2	O	External crystal signal output (13.5 MHz)
13	MS	I	Not used. (connected to ground.)
14	SCKOUT	O	Not used. (open) Audio clock signal output
15	LRCKI1	I	LRCK clock signal input
16	VDDE	—	Power supply pin (+3.3 V)
17	BCKI1	I	BCK clock signal input
18	SDI1	I	Audio serial data signal input
19	LRCKO	O	LRCK clock signal output
20	BCKO	O	BCK clock signal output
21	VSS	—	Ground pin
22	KFSIO	I	KFSIO signal input
23	SDO1	O	Audio serial data signal output 1
24	SDO2	O	Audio serial data signal output 2
25	SDO3	O	Audio serial data signal output 3
26	SDO4	O	Audio serial data signal output 4
27	SPDIF	O	Not used. (open) S/P DIF signal output
28	LRCKI2	I	LRCK clock signal input
29	BCKI2	I	BCK clock signal input
30	SDI2	I	Audio serial data signal input
31	VSS	—	Ground pin
32	HACN	O	Host I/F acknowledge signal output
33	HDIN	I	Host I/F serial data signal input
34	HCLK	I	Host I/F serial clock signal input
35	HDOUT	O	Host I/F serial data signal output
36	HCS	I	Host I/F chip select signal input
37	SDCLK	O	Not used. (open)
38	CLKEN	O	Not used. (open)
39	RAS	O	Not used. (open)
40	VDDI	—	Power supply pin (+3.3 V)
41	VSS	—	Ground pin
42	CAS	O	Not used. (open)
43	DQM/OE0	O	Not used. (open)
44	CS0	—	Ground pin
45	WE0	O	External memory write enable signal output
46	VDDE	—	Power supply pin (+3.3 V)
47	WMD1	I	Not used. (connected to VDDE.) External memory wait mode signal input 1
48	VSS	—	Ground pin
49	WMD0	I	Not used. (connected to VDDE.) External memory wait mode signal input 0
50	PAGE2	O	External memory page select signal output
51	VSS	—	Ground pin

Pin No.	Pin Name	I/O	Pin Description
52	PAGE1	O	Not used. (open)
53	PAGE0	O	Not used. (open)
54	BOOT	I	Not used. (connected to ground.)
55	BTACT	O	Not used. (open)
56	BST	I	DSP BST signal input
57	MOD1	I	Not used. (connected to VDDE.)
58	MOD0	I	Not used. (connected to ground.)
59	EXLOCK	I	DIR error input from LC89056W (IC1101)
60	VDDI	—	Power supply pin (+3.3 V)
61	VSS	—	Ground pin
62, 63	A17,A16	O	Not used. (open)
64 to 66	A15-13	O	Address data output to RAM (IC1202)
67	GP10	O	BCK clock output to SSM Not used. (open)
68	GP9	O	GP signal output to MB91F155-2ESX100 (IC2001)
69	GP8	O	Audio signal output to LC89056W (IC1101)
70	VDDI	—	Power supply pin (+3.3 V)
71	VSS	—	Ground pin
72	D15/GP7	I/O	Data input/output to RAM (IC1202)
73	D14/GP6	I/O	Data input/output to RAM (IC1202)
74	D13/GP5	I/O	Data input/output to RAM (IC1202)
75	D12/GP4	I/O	Data input/output to RAM (IC1202)
76	VDDE	—	Power supply pin (+3.3 V)
77	D11/GP3	I/O	Data input/output to RAM (IC1202)
78	D10/GP2	I/O	Data input/output to RAM (IC1202)
79	D9/GP1	I/O	Data input/output to RAM (IC1202)
80	D8/GP0	I/O	Data input/output to RAM (IC1202)
81	VSS	—	Ground pin
82 to 85	A9-12	O	Address data output to RAM (IC1202)
86	TD0	I	Not used. (connected to VDDE.)
87	TMS	I	Not used. (connected to VDDE.)
88	XTRST	I	Not used. (connected to VDDE.)
89	TCK	I	Not used. (connected to VDDE.)
90	TDI	I	Not used. (connected to VDDE.)
91	VSS	—	Ground pin
92 to 97	A8-3	O	Address data output to RAM (IC1202)
98, 89	D7,D6	I/O	Data input/output to RAM (IC1202)
100	VDDI	—	Power supply pin (+3.3 V)
101	VSS	—	Ground pin
102 to 105	D5-2	I/O	Data input/output to RAM (IC1202)
106	VDDE	—	Power supply pin (+3.3 V)
107, 108	D1,D0	I/O	Data input/output to RAM (IC1202)
109, 110	A2,A1	O	Address data output to RAM (IC1202)
111	VSS	—	Ground pin
112	A0	O	Address data output to RAM (IC1202)
113	PM	I	PM signal input from MB91F155-2ESX100 (IC2001)
114	SDI3	I	Sound data input Not used. (open)
115	SDI4	I	Sound data input Not used. (open)
116	SYNC	I	Not used. (connected to VDDE.)
117	VSS	—	Ground pin
118	VSS	—	Ground pin
119	VSS	—	Ground pin
120	VDDI	—	Power supply pin (+3.3 V)

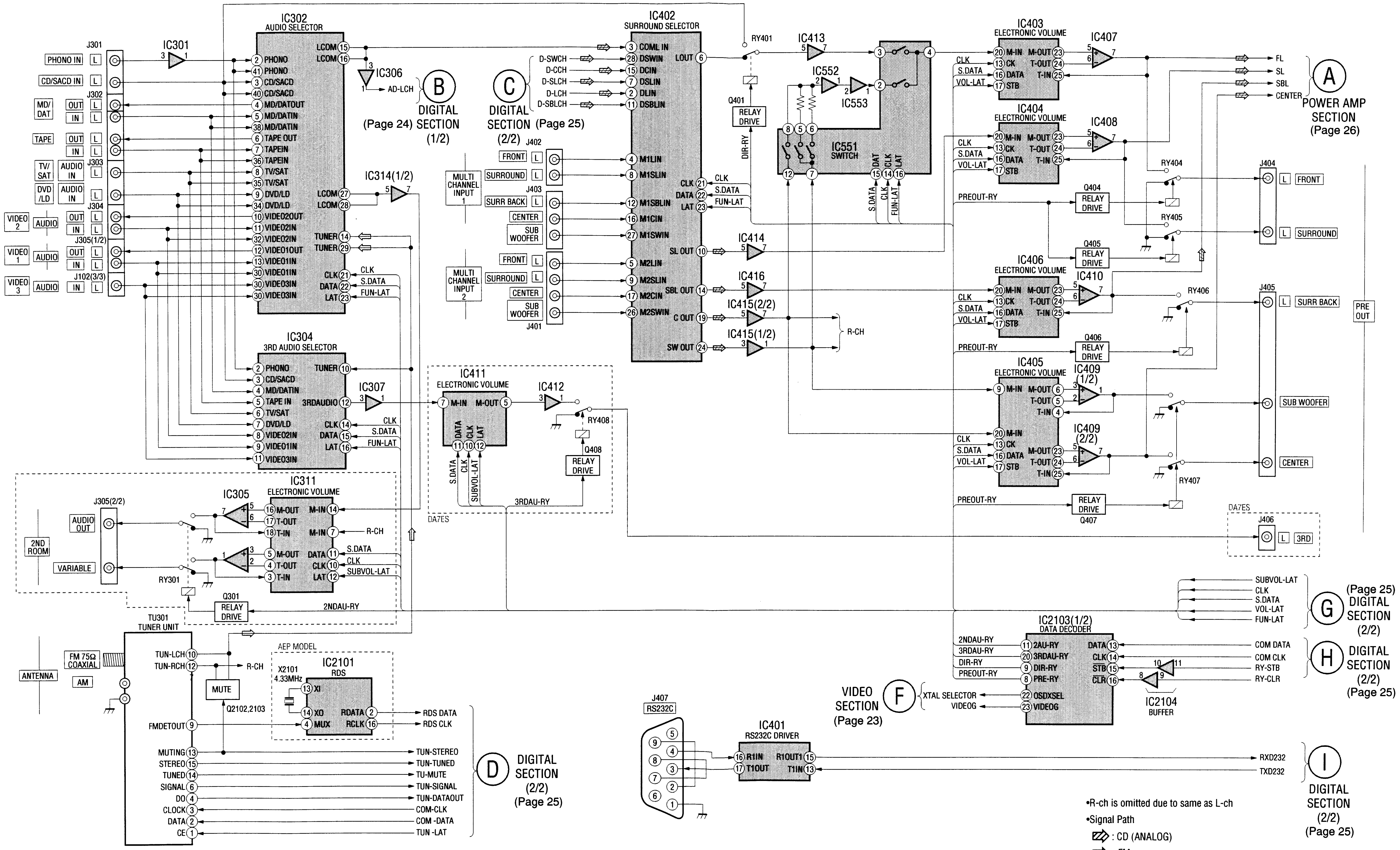
- **IC2001 MB91F155-2ESX100 (SYSTEM CONTROL) (DIGITAL BOARD (2/7))**

Pin No.	Pin Name	I/O	Pin Description
1	DSP1MOD1	O	SSM select signal output
2	XMODE	O	Mode signal output to LC89056W (IC1101)
3	CKSEL	O	Clock select signal output to LC89056W (IC1101)
4	DIR-CLK	O	Clock signal output to LC89056W (IC1101)
5	DIR-CE	O	Chip enable signal output to LC89056W (IC1101)
6	DIR-DI	O	Data output to LC89056W (IC1101)
7	DIR-DO	I	Data input from LC89056W (IC1101)
8	DIR-ERROR	I	Dir error input from LC89056W (IC1101)
9	VSS	—	Ground pin
10	DIR-DATAO	I	Dir data input
11	DIR-XSTATE	I	Dir state signal input
12	CLK-SW	O	Clock select signal output
13	DAMUTE	O	D/A output muting signal output
14	1XRST	O	Reset signal output to DSP1 (IC1201)
15	1PM	O	PM signal output to DSP1 (IC1201)
16	1GP9	I	GP signal input from DSO1 (IC1201)
17	1BST	O	BST signal output to DSP1 (IC1201)
18	1HCS	O	HCS signal output to DSP1 (IC1401)
19	1HDOUT	I	HD input from DSP1 (IC1201)
20	1HACN	I	HACN signal input from DSP1 (IC1201)
21	2XRST	O	BST signal output to DSP2 (IC1401)
22	2BST	O	Reset signal output to DSP2 (IC1401)
23	2PM	O	PM signal output to DSP2 (IC1401)
24	2EXLOCK	O	Ext lock signal output to DSP2 (IC1401)
25	3EXLOCK	O	Ext lock signal output to DSP3 (IC1501)
26	VSS	—	Ground pin
27	VCC	—	Power supply pin (+3.3 V)
28	2HACN	I	HACN signal input from DSP2 (IC1401)
29	2HDOUT	I	HD input from DSP2 (IC1401)
30	2HCS	O	HCS signal output to DSP2 (IC1401)
31	3XRST	O	Reset signal output to DSP3 (IC1501)
32	3BST	O	BST signal output to DSP3 (IC1501)
33	3PM	O	PM signal output to DSP3 (IC1501)
34	3HACN	I	HACN signal input from DSP3 (IC1501)
35	3HDOUT	I	HD input from DSP3 (IC1501)
36	3HCS	O	HCS signal output to DSP3 (IC1501)
37	DARST	O	Reset signal output to D/A converter (IC1602)
38	DA2LAT	O	Serial data latch signal output to D/A converter (IC1602)
39	DACLK	O	Serial clock output to D/A converter (IC1602)
40	DADATAOUT	O	Serial data output to D/A converter (IC1602)
41	DA2DATAIN	I	Serial data input from D/A converter (IC1602)
42	DA1LAT	O	Serial data latch signal output to D/A converter (IC1602)
43	DA1DATAIN	I	Serial data input from D/A converter (IC1602)
44	VSS	—	Ground pin
45	ADINT	O	INT signal output to AK5352 (IC1701)
46	DSP2 GP3	I	GP3 signal input from DSP2 (IC1401)
47	END FLAG	I	End flag input from UART (IC1901)
48	DSP3 GP3	I	GP3 signal input from DSP3 (IC1501)
49	MBUS-STS0	I	M-BUS status input
50	CTLAT	O	Control latch signal output to UART (IC1901)

Pin No.	Pin Name	I/O	Pin Description
51	A1O	O	Control A1 signal output to UART (IC1901)
52	MD2	I	Mode signal input
53	MD1	I	Connected to VCC.
54	MD0	I	Mode signal input
55	RSTX	I	System reset input
56	VCC	—	Power supply pin (+3.3 V)
57	X1	I	External crystal terminal (16.5 MHz)
58	X0	O	External crystal terminal (16.5 MHz)
59	VSS	—	Ground pin
60	STOP	I	AC power OFF signal input
61	RDS CLK	I	Clock signal input from RDS
62	POWER SW	I	Power switch input
63	MBUS-STS1	I	M-BUS status input
64	MBUS-STS2	I	M-BUS status input
65	MBUS-STS3	I	M-BUS status input
66	SIRCS	I	SIRCS serial data input
67	MBUS-STS4	I	M-BUS status input
68	VCC	—	Power supply pin (+3.3 V)
69	PWRY	O	AC power relay drive signal output
70	MSTO	O	M-BUS status output
71	HP	I	headphone connect signal input
72	PROT	I	Power amp protector signal input
73	ACMUTE	O	Power amp muting signal output
74	OSD-VSINC	I	V-sync signal input
75	NOUSE	O	Connected to GND.
76	OSD-LAT	O	OSD latch signal output
77	VCC	—	Power supply pin (+3.3 V)
78	RY-STB	O	STB signal output to NJU3716M (IC2103)
79	RY-CLR	O	Clear signal output to NJU3716M (IC2103)
80	FUN-LAT	O	Latch signal output to audio selector
81	VIDEO-RCK	O	RCK signal output to video selector
82	SUBVOL-LAT	O	Latch signal output
83	VOL-LAT	O	Latch signal output to EVR
84	TUN-TUNED	I	Tuned signal input from tuner (TU301)
85	TUN-STEREO	I	Stereo signal input from tuner (TU301)
86	TUN-LAT	O	Latch signal output to tuner (TU301)
87	TUN-DO	O	Serial data output to tuner (TU301)
88	TUN-MUTE	O	Mute signal output to tuner (TU301)
89	A1I	I	Control A1 signal input from UART (IC1901)
90	COM-CLK	O	Common clock output
91	COM-DATA	O	Common data output
92	RDS-DATA	I	Serial data input from RDS
93	RST TRG	O	Reset trigger output
94	PG3/OPTC	O	Digital (optical) input select signal output
95	PG4/OPTB	O	Digital (optical) input select signal output
96	TRG3	O	12 V trigger signal output
97	VCC	—	Power supply pin (+3.3 V)
98	VSS	—	Ground pin
99	EEPROM SDA	I/O	Serial data input/output to EEPROM (IC2002)
100	EEPROM SCL	O	Clock output to EEPROM (IC2002)

Pin No.	Pin Name	I/O	Pin Description
101	VSS	—	Ground pin
102	HCLK	O	H clock output to all DSP
103	HDIN	O	H data output to all DSP
104	FR-ASP	I	Speaker select switch signal input
105	OSD-CLK	O	Clock output
106	OSD-DAT	O	Serial data output
107	TRG2	O	12 V trigger signal output
108	TRGMAIN	O	12 V trigger main signal output
109	SOT1	O	Serial data output to RS-232C (J407)
110	SIN1	I	Serial data input to RS-232C (J407)
111	FL CLK	O	Clock signal output to FL display (FL101)
112	FL DIN	O	serial data output to FL display (FL101)
113	FL LAT	O	Latch signal output to FL display (FL101)
114	FL CLR	O	Clear signal output to FL display (FL101)
115	FR-BSP	I	Speaker select switch signal input
116	JOGUP	I	JOG dial up signal input
117	JOGDOWN	I	JOG dial down signal input
118	FUNCUP	I	Function dial up signal input
119	FUNCDWN	I	Function dial down signal input
120	VOLUP	O	Volume dial up signal output
121	VOLDWN	O	Volume dial down signal output
122	VCC	—	Power supply pin (+3.3 V)
123	OPTA	O	Digital (optical) input select signal output
124	LEDCLR	O	Clock output to LED driver
125	LEDSTB	O	Strobe signal output toLED driver
126	DAVS (VSS)	—	Ground pin
127	DAVC (VCC)	—	Power supply pin (+3.3 V)
128	AVCC (VCC)	—	Power supply pin (+3.3 V)
129	AVRH (VCC)	—	Power supply pin (+3.3 V)
130	AVRL (VSS)	—	Ground pin
131	AVSS (VSS)	—	Ground pin
132	AD1	I	Key function A/D input
133	AD2	I	Key function A/D input
134	AD3	I	Key function A/D input
135	AD4	I	Key function A/D input
136	AD5	I	Key function A/D input
137	VERSION	I	Version set terminal
138	RDS SIGNAL	I	RDS signal input
139	NOUSE	I	Connected to GND.
140	VCC2	—	Power supply pin (+3.3 V)
141	BACKUP	I	Connected to VCC.
142	XOA	O	AEP model: Not used. (open) Except AEP model: Connected to GND.
143	XIA	I	Not used. (open)
144	VSS	—	Ground pin

6-2. BLOCK DIAGRAM — AUDIO SECTION —


IC302
AUDIO SELECTOR
IC301
J301
PHONO IN
CD/SACD IN
MD/DAT
TAPE
TV/SAT
DVD/LD
VIDEO 2
VIDEO 1
VIDEO 3
AUDIO IN
AUDIO
OUT
IN
J302
J303
J304
J305(1/2)
J102(3/3)
PHONO
CD/SACD
MD/DATOUT
MD/DATIN
TAPE OUT
TAPEIN
TV/SAT
DVD/LD
VIDEO2OUT
VIDEO2IN
VIDEO1OUT
VIDEO1IN
VIDEO3IN
LCOM
TUNER
CLK
DATA
LAT
S.DATA
FUN-LAT
IC306
AD-LCH
B
DIGITAL SECTION (1/2) (Page 24)
C
DIGITAL SECTION (2/2) (Page 25)
IC314(1/2)
D-SWCH
D-CCH
D-SLCH
D-LCH
D-SBLCH
IC402
SURROUND SELECTOR
COML IN
DSWIN
DCIN
DSLIN
DLIN
DSBLIN
LOUT
M1LIN
M1SLIN
M1SBLIN
M1CIN
M1SWIN
M2LIN
M2SLIN
M2CIN
M2SWIN
SL OUT
SBL OUT
C OUT
SW OUT
MULTI CHANNEL INPUT 1
MULTI CHANNEL INPUT 2
J402
J403
J401
FRONT
SURROUND
SURR BACK
CENTER
SUB WOOFER
IC414
IC416
IC415(2/2)
IC415(1/2)
R-CH
RY401
Q401
RELAY DRIVE
DIR-RY
IC413
IC552
IC553
IC551
SWITCH
DAT
FUN-LAT
IC403
ELECTRONIC VOLUME
M-IN
CK
STB
M-OUT
T-OUT
T-IN
VOL-LAT
IC407
IC404
IC408
IC406
IC410
IC405
IC409(1/2)
IC409(2/2)
PREOUT-RY
Q404
Q405
Q406
Q407
RY404
RY405
RY406
RY407
J404
J405
J406
DA7ES
3RD
PRE OUT
FL
SL
SBL
CENTER
A
POWER AMP SECTION (Page 26)
IC304
3RD AUDIO SELECTOR
TAPE IN
3RDAUDIO
IC307
IC411
ELECTRONIC VOLUME
IC412
RY408
Q408
SUBVOL-LAT
3RDAU-RY
J305(2/2)
2ND ROOM
VARIABLE
RY301
Q301
IC305
IC311
2NDAU-RY
TU301
TUNER UNIT
ANTENNA
FM 75Ω COAXIAL
AM
TUN-LCH
TUN-RCH
MUTE
Q2102,2103
FMDETOUT
MUTING
STEREO
TUNED
SIGNAL
DO
CLOCK
CE
AEP MODEL
IC2101
RDS
X2101
4.33MHz
XI
XO
MUX
RDATA
RCLK
RDS DATA
RDS CLK
TUN-STEREO
TUN-TUNED
TU-MUTE
TUN-SIGNAL
TUN-DATAOUT
COM-CLK
COM -DATA
TUN -LAT
D
DIGITAL SECTION (2/2) (Page 25)
J407
RS232C
IC401
RS232C DRIVER
R1IN
T1OUT
R1OUT1
T1IN
RXD232
TXD232
I
DIGITAL SECTION (2/2) (Page 25)
F
VIDEO SECTION (Page 23)
XTAL SELECTOR
VIDEOG
IC2103(1/2)
DATA DECODER
2AU-RY
3RDAU-RY
PRE-RY
OSDXSEL
COM DATA
COM CLK
RY-STB
RY-CLR
IC2104
BUFFER
H
DIGITAL SECTION (2/2) (Page 25)
G
DIGITAL SECTION (2/2) (Page 25)

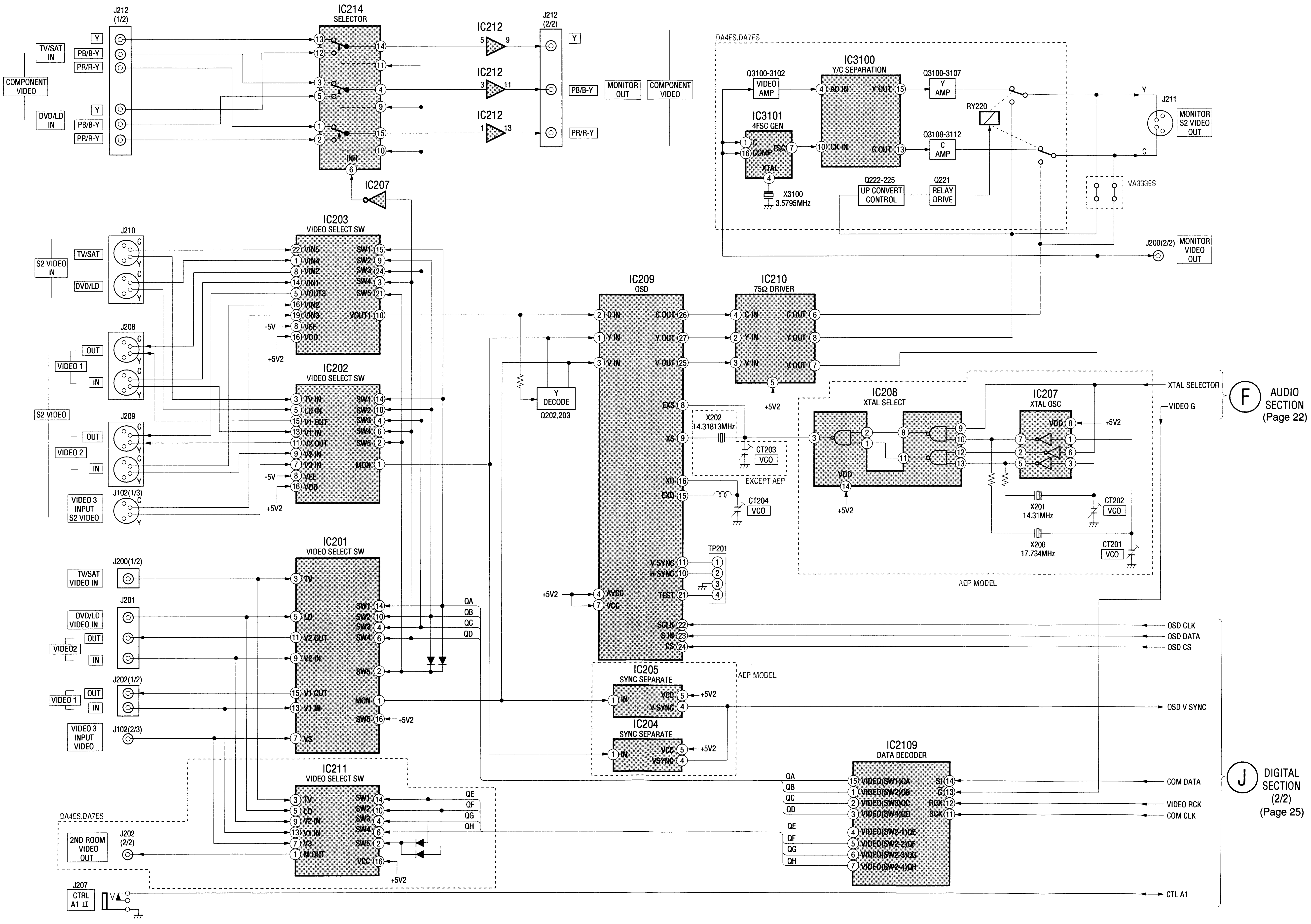
•R-ch is omitted due to same as L-ch

•Signal Path

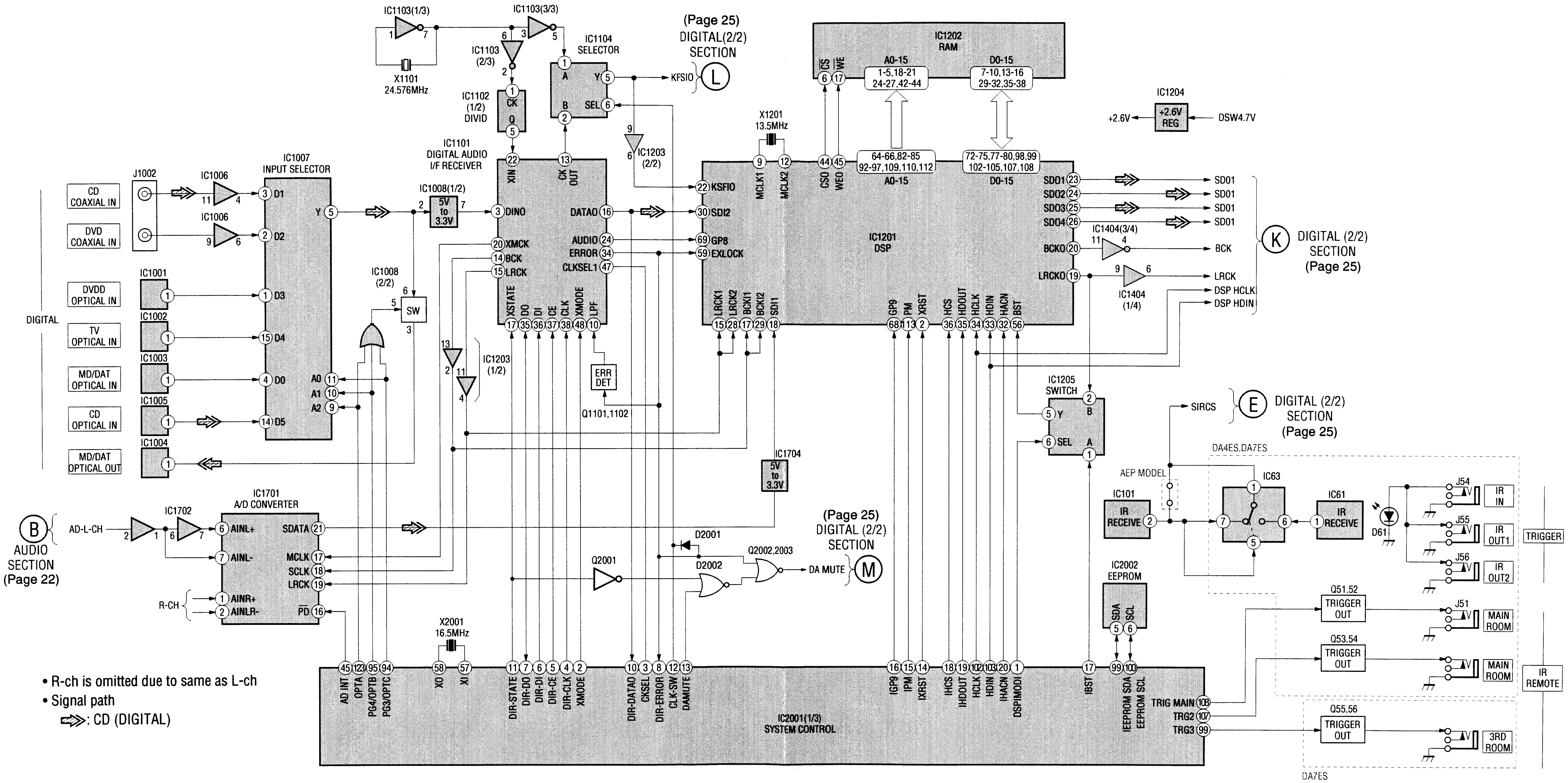
⇨ : CD (ANALOG)

⇨ : FM

6-3. BLOCK DIAGRAM — VIDEO SECTION —

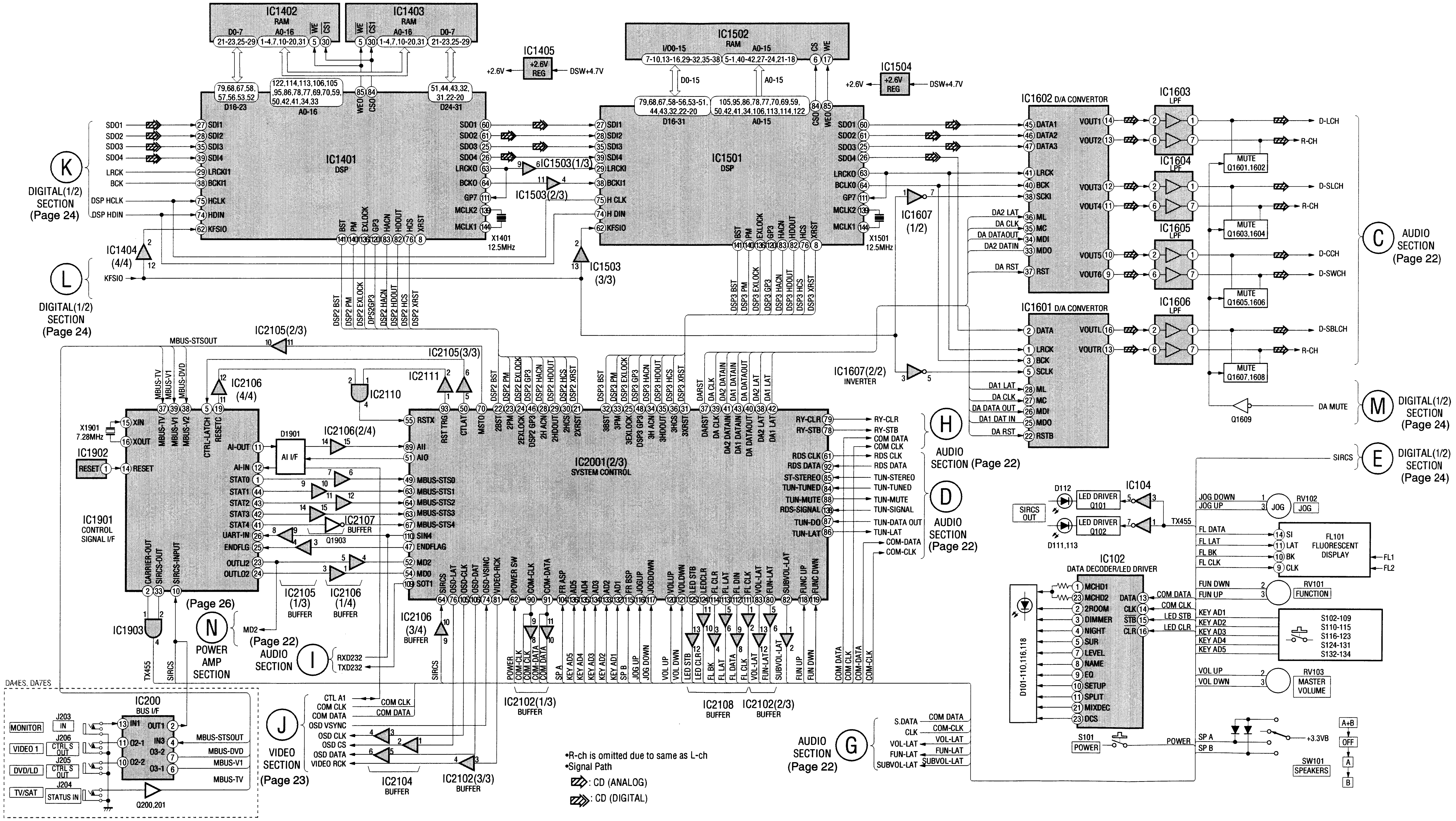

J212 (1/2)
TV/SAT IN
COMPONENT VIDEO
DVD/LD IN
Y
PB/B-Y
PR/R-Y
IC214 SELECTOR
INH
IC207
IC212
J212 (2/2)
MONITOR OUT
COMPONENT VIDEO
DA4ES,DA7ES
IC3100 Y/C SEPARATION
Q3100-3102 VIDEO AMP
AD IN
Y OUT
CK IN
C OUT
Q3100-3107 Y AMP
Q3108-3112 C AMP
IC3101 4FSC GEN
C
COMP
FSC
XTAL
X3100 3.5795MHz
RY220
Q222-225 UP CONVERT CONTROL
Q221 RELAY DRIVE
J211
MONITOR S2 VIDEO OUT
VA333ES
J200(2/2)
MONITOR VIDEO OUT
J210
S2 VIDEO IN
TV/SAT
DVD/LD
IC203 VIDEO SELECT SW
VIN5
VIN4
VIN2
VIN1
VOUT3
VIN2
VIN3
VEE
VDD
SW1
SW2
SW3
SW4
SW5
VOUT1
-5V
+5V2
J208
VIDEO 1
OUT
IN
S2 VIDEO
J209
VIDEO 2
VIDEO 3 INPUT S2 VIDEO
J102(1/3)
IC202 VIDEO SELECT SW
TV IN
LD IN
V1 OUT
V1 IN
V2 OUT
V2 IN
V3 IN
VEE
VDD
MON
IC209 OSD
C IN
Y IN
V IN
C OUT
Y OUT
V OUT
EXS
XS
XD
EXD
V SYNC
H SYNC
TEST
SCLK
S IN
CS
AVCC
VCC
Y DECODE
Q202,203
X202 14.31813MHz
CT203 VCO
EXCEPT AEP
CT204 VCO
TP201
IC210 75Ω DRIVER
C IN
Y IN
V IN
C OUT
Y OUT
V OUT
IC208 XTAL SELECT
VDD
IC207 XTAL OSC
VDD
X201 14.31MHz
CT202 VCO
X200 17.734MHz
CT201 VCO
AEP MODEL
XTAL SELECTOR
VIDEO G
F AUDIO SECTION (Page 22)
J200(1/2)
TV/SAT VIDEO IN
J201
DVD/LD VIDEO IN
VIDEO2
J202(1/2)
VIDEO 1
VIDEO 3 INPUT VIDEO
J102(2/3)
IC201 VIDEO SELECT SW
TV
LD
V2 OUT
V2 IN
V1 OUT
V1 IN
V3
MON
QA
QB
QC
QD
IC205 SYNC SEPARATE
IN
VCC
V SYNC
IC204 SYNC SEPARATE
VSYNC
AEP MODEL
OSD CLK
OSD DATA
OSD CS
OSD V SYNC
IC211 VIDEO SELECT SW
M OUT
QE
QF
QG
QH
DA4ES,DA7ES
2ND ROOM VIDEO OUT
J202 (2/2)
IC2109 DATA DECODER
VIDEO(SW1)QA
VIDEO(SW2)QB
VIDEO(SW3)QC
VIDEO(SW4)QD
VIDEO(SW2-1)QE
VIDEO(SW2-2)QF
VIDEO(SW2-3)QG
VIDEO(SW2-4)QH
SI
G
RCK
SCK
COM DATA
VIDEO RCK
COM CLK
J DIGITAL SECTION (2/2) (Page 25)
J207
CTRL A1 II
CTL A1

6-4. BLOCK DIAGRAM — DIGITAL SECTION (1/2) —


IC1103(1/3)
IC1103(3/3)
X1101
24.576MHz
IC1103 (2/3)
IC1102 (1/2) DIVID
CK
Q
IC1104 SELECTOR
A
Y
B
SEL
(Page 25) DIGITAL(2/2) SECTION
KFSIO
L
IC1202 RAM
CS
WE
A0-15
1-5,18-21
24-27,42-44
D0-15
7-10,13-16
29-32,35-38
IC1204
+2.6V
+2.6V REG
DSW4.7V
X1201 13.5MHz
IC1203 (2/2)
IC1101 DIGITAL AUDIO I/F RECEIVER
XIN
CK OUT
DINO
DATAO
XMCK
BCK
LRCK
AUDIO
ERROR
CLKSEL1
XSTATE
DO
DI
CE
CLK
XMODE
LPF
ERR DET
Q1101,1102
IC1008(1/2)
5V to 3.3V
IC1008 (2/2)
SW
IC1203 (1/2)
J1002
IC1006
IC1007 INPUT SELECTOR
CD COAXIAL IN
DVD COAXIAL IN
DVDD OPTICAL IN
TV OPTICAL IN
MD/DAT OPTICAL IN
CD OPTICAL IN
MD/DAT OPTICAL OUT
DIGITAL
IC1001
IC1002
IC1003
IC1005
IC1004
D1
D2
D3
D4
D0
D5
Y
A0
A1
A2
KSFIO
SDI2
GP8
EXLOCK
MCLK1
MCLK2
CSO
WEO
64-66,82-85
92-97,109,110,112
A0-15
72-75,77-80,98,99
102-105,107,108
D0-15
IC1201 DSP
SDO1
SDO2
SDO3
SDO4
BCKO
LRCKO
LRCK1
LRCK2
BCKI1
BCKI2
SDI1
GP9
IPM
XRST
IHCS
IHDOUT
HCLK
HDIN
HACN
BST
IC1404(3/4)
IC1404 (1/4)
SD01
BCK
LRCK
DSP HCLK
DSP HDIN
K
DIGITAL (2/2) SECTION (Page 25)
IC1205 SWITCH
SEL
SIRCS
E
DIGITAL (2/2) SECTION (Page 25)
DA4ES,DA7ES
AEP MODEL
IC63
IC101 IR RECEIVE
IC61 IR RECEIVE
D61
J54
IR IN
J55
IR OUT1
J56
IR OUT2
TRIGGER
IC2002 EEPROM
SDA
SCL
Q51,52 TRIGGER OUT
J51
MAIN ROOM
Q53,54 TRIGGER OUT
MAIN ROOM
IR REMOTE
Q55,56 TRIGGER OUT
3RD ROOM
DA7ES
IC1704
5V to 3.3V
(Page 25) DIGITAL (2/2) SECTION
D2001
Q2002,2003
D2002
DA MUTE
M
Q2001
B
AUDIO SECTION (Page 22)
AD-L-CH
IC1702
IC1701 A/D CONVERTER
AINL+
AINL-
AINR+
AINLR-
SDATA
MCLK
SCLK
LRCK
PD
R-CH
X2001 16.5MHz
AD INT
OPTA
PG4/OPTB
PG3/OPTC
XO
XI
DIR-STATE
DIR-DO
DIR-DI
DIR-CE
DIR-CLK
XMODE
DIR-DATAO
CKSEL
DIR-ERROR
CLK-SW
DAMUTE
IC2001(1/3) SYSTEM CONTROL
IGP9
IPM
IXRST
IHCS
IHDOUT
HCLK
HDIN
IHACN
DSPIMODI
IBST
IEEPROM SDA
EEPROM SCL
TRIG MAIN
TRG2
TRG3

- R-ch is omitted due to same as L-ch
- Signal path
  ⇨: CD (DIGITAL)

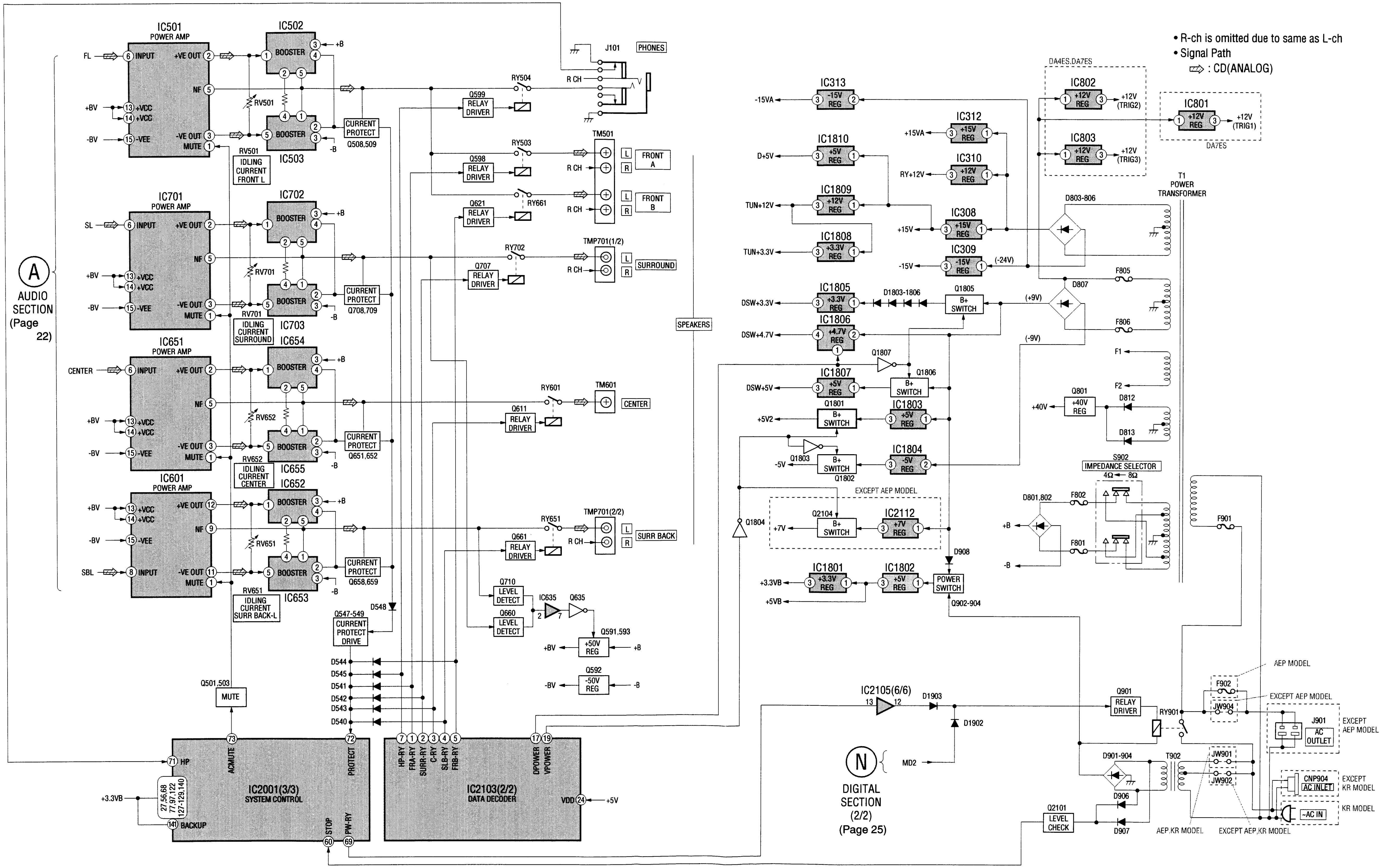
6-5. BLOCK DIAGRAM — DIGITAL SECTION (2/2) —


IC1402 RAM
IC1403 RAM
IC1405 +2.6V REG
IC1502 RAM
IC1504 +2.6V REG
IC1401 DSP
IC1501 DSP
IC1503(1/3)
IC1503(2/3)
IC1503 (3/3)
IC1404 (4/4)
X1401 12.5MHz
X1501 12.5MHz
IC1602 D/A CONVERTOR
IC1601 D/A CONVERTOR
IC1603 LPF
IC1604 LPF
IC1605 LPF
IC1606 LPF
MUTE Q1601,1602
MUTE Q1603,1604
MUTE Q1605,1606
MUTE Q1607,1608
Q1609
DA MUTE
D-LCH
R-CH
D-SLCH
D-CCH
D-SWCH
D-SBLCH
IC1607 (1/2)
IC1607(2/2) INVERTER
K DIGITAL(1/2) SECTION (Page 24)
L DIGITAL(1/2) SECTION (Page 24)
C AUDIO SECTION (Page 22)
M DIGITAL(1/2) SECTION (Page 24)
E DIGITAL(1/2) SECTION (Page 24)
H AUDIO SECTION (Page 22)
D AUDIO SECTION (Page 22)
G AUDIO SECTION (Page 22)
N POWER AMP SECTION (Page 26)
I AUDIO SECTION (Page 22)
J VIDEO SECTION (Page 23)
IC2001(2/3) SYSTEM CONTROL
IC1901 CONTROL SIGNAL I/F
X1901 7.28MHz
IC1902 RESET
D1901 AI I/F
IC1903
IC2105(2/3)
IC2105(3/3)
IC2106 (4/4)
IC2106(2/4)
IC2110
IC2111
IC2107 BUFFER
Q1903
IC2105 (1/3) BUFFER
IC2106 (1/4) BUFFER
IC2106 (3/4) BUFFER
IC2102(1/3) BUFFER
IC2108 BUFFER
IC2102(2/3) BUFFER
IC2104 BUFFER
IC2102(3/3) BUFFER
DA4ES, DA7ES
IC200 BUS I/F
MONITOR J203 IN
VIDEO 1 J206 CTRL S OUT
DVD/LD J205 CTRL S OUT
TV/SAT J204 STATUS IN
Q200,201
MBUS-STSOUT
MBUS-DVD
MBUS-V1
MBUS-TV
IC104
D112 LED DRIVER Q101
LED DRIVER Q102
D111,113
SIRCS OUT
RV102 JOG
FL101 FLUORESCENT DISPLAY
IC102 DATA DECODER/LED DRIVER
D101-110,116,118
RV101 FUNCTION
S102-109 S110-115 S116-123 S124-131 S132-134
RV103 MASTER VOLUME
S101 POWER
SW101 SPEAKERS
A+B
OFF
A
B
+3.3VB
FL1
FL2

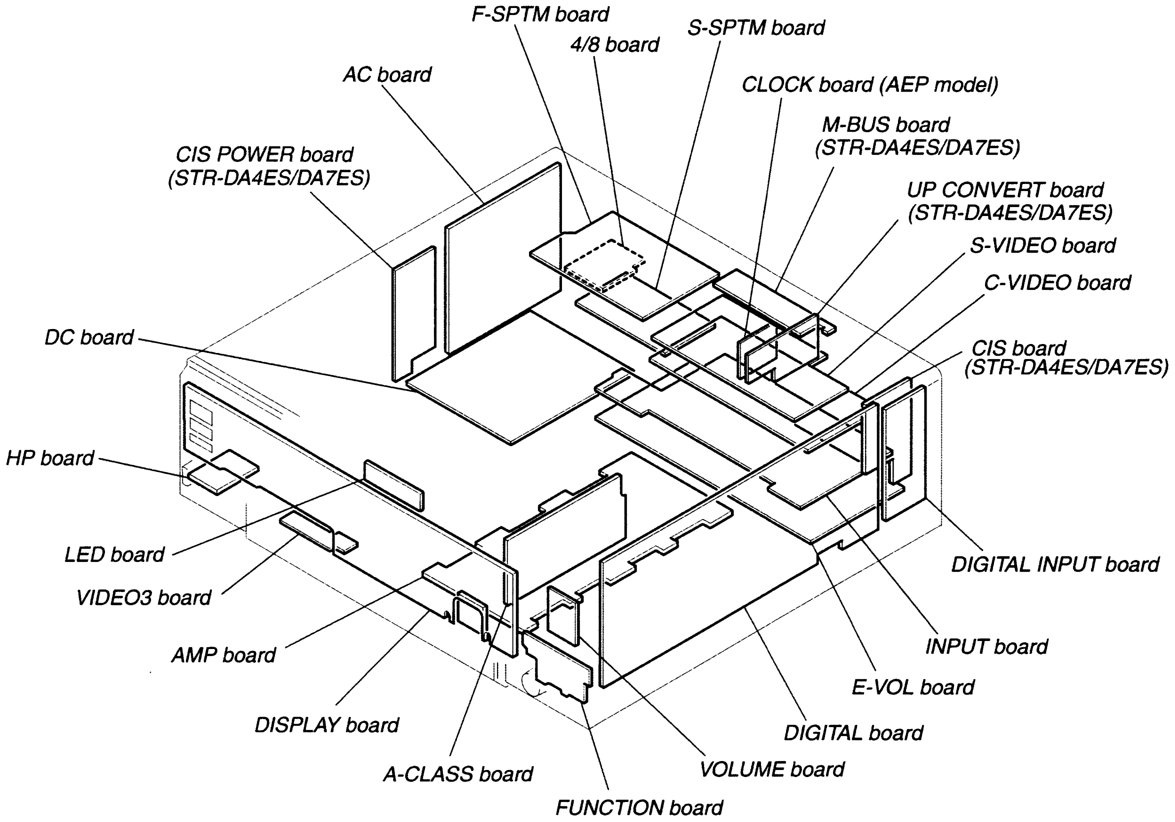
•R-ch is omitted due to same as L-ch
•Signal Path
▨: CD (ANALOG)
▨: CD (DIGITAL)

6-6. BLOCK DIAGRAM — POWER AMP SECTION —

- R-ch is omitted due to same as L-ch
- Signal Path
  ⇨ : CD(ANALOG)


IC501 POWER AMP
IC502 BOOSTER
IC503 BOOSTER
RV501 IDLING CURRENT FRONT L
CURRENT PROTECT Q508,509
IC701 POWER AMP
IC702 BOOSTER
IC703 BOOSTER
RV701 IDLING CURRENT SURROUND
CURRENT PROTECT Q708,709
IC651 POWER AMP
IC654 BOOSTER
IC655 BOOSTER
RV652 IDLING CURRENT CENTER
CURRENT PROTECT Q651,652
IC601 POWER AMP
IC652 BOOSTER
IC653 BOOSTER
RV651 IDLING CURRENT SURR BACK-L
CURRENT PROTECT Q658,659
FL
SL
CENTER
SBL
INPUT
+VE OUT
-VE OUT
NF
MUTE
+VCC
-VEE
+BV
-BV
+B
-B
A
AUDIO SECTION (Page 22)
J101 PHONES
R CH
RY504
Q599 RELAY DRIVER
RY503
Q598 RELAY DRIVER
RY661
Q621 RELAY DRIVER
TM501
FRONT A
FRONT B
L
R
RY702
Q707 RELAY DRIVER
TMP701(1/2)
SURROUND
SPEAKERS
RY601
Q611 RELAY DRIVER
TM601
CENTER
RY651
Q661 RELAY DRIVER
TMP701(2/2)
SURR BACK
Q710 LEVEL DETECT
Q660 LEVEL DETECT
IC635
Q635
Q591,593
+50V REG
Q592
-50V REG
D548
Q547-549 CURRENT PROTECT DRIVE
D544
D545
D541
D542
D543
D540
Q501,503 MUTE
IC2001(3/3) SYSTEM CONTROL
HP
ACMUTE
PROTECT
BACKUP
STOP
PW-RY
27,56,68 77,97,122 127-129,140
+3.3VB
IC2103(2/2) DATA DECODER
HP-RY
FRA-RY
SURR-RY
C-RY
SLB-RY
FRB-RY
DPOWER
VPOWER
VDD
+5V
IC313 -15V REG
-15VA
IC1810 +5V REG
D+5V
IC1809 +12V REG
TUN+12V
IC1808 +3.3V REG
TUN+3.3V
IC1805 +3.3V REG
DSW+3.3V
D1803-1806
Q1805 B+ SWITCH
IC1806 +4.7V REG
DSW+4.7V
Q1807
IC1807 +5V REG
DSW+5V
Q1806 B+ SWITCH
Q1801 B+ SWITCH
+5V2
IC1803 +5V REG
Q1803
-5V
Q1802 B+ SWITCH
IC1804 -5V REG
EXCEPT AEP MODEL
Q2104 B+ SWITCH
+7V
IC2112 +7V REG
Q1804
D908
IC1801 +3.3V REG
IC1802 +5V REG
+3.3VB
+5VB
POWER SWITCH Q902-904
IC312 +15V REG
+15VA
IC310 +12V REG
RY+12V
IC308 +15V REG
+15V
IC309 -15V REG
-15V
(-24V)
(+9V)
(-9V)
DA4ES,DA7ES
IC802 +12V REG +12V (TRIG2)
IC803 +12V REG +12V (TRIG3)
IC801 +12V REG +12V (TRIG1)
DA7ES
D803-806
T1 POWER TRANSFORMER
D807
F805
F806
F1
F2
Q801 +40V REG
+40V
D812
D813
S902 IMPEDANCE SELECTOR 4Ω ← 8Ω
D801,802
F802
F801
F901
IC2105(6/6)
D1903
D1902
N
DIGITAL SECTION (2/2) (Page 25)
MD2
Q901 RELAY DRIVER
RY901
D901-904
T902
D906
D907
Q2101 LEVEL CHECK
AEP,KR MODEL
EXCEPT AEP,KR MODEL
F902
JW904
JW901
JW902
AEP MODEL
EXCEPT AEP MODEL
J901 AC OUTLET
EXCEPT AEP MODEL
CNP904 AC INLET
EXCEPT KR MODEL
~AC IN
KR MODEL

6-7. CIRCUIT BOARDS LOCATION


F-SPTM board
4/8 board
S-SPTM board
AC board
CLOCK board (AEP model)
M-BUS board
(STR-DA4ES/DA7ES)
CIS POWER board
(STR-DA4ES/DA7ES)
UP CONVERT board
(STR-DA4ES/DA7ES)
S-VIDEO board
C-VIDEO board
DC board
CIS board
(STR-DA4ES/DA7ES)
HP board
LED board
VIDEO3 board
AMP board
DISPLAY board
A-CLASS board
FUNCTION board
VOLUME board
DIGITAL board
E-VOL board
INPUT board
DIGITAL INPUT board

MEMO

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ☐ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ━━━ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- ☐ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ⇨ : CD (ANALOG)
  ⇨ : CD (DIGITAL)
- Abbreviation
  CND : Canadian model.
  TW : Taiwan model.
  KR : Korea model.

For printed wiring boards.

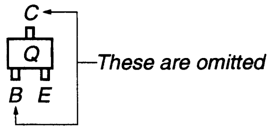
Note:

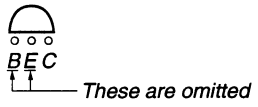
- o—— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▨ : Pattern from the side which enables seeing.

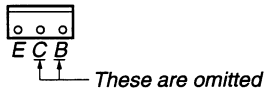
(The other layers' patterns are not indicated.)

Caution:

Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.



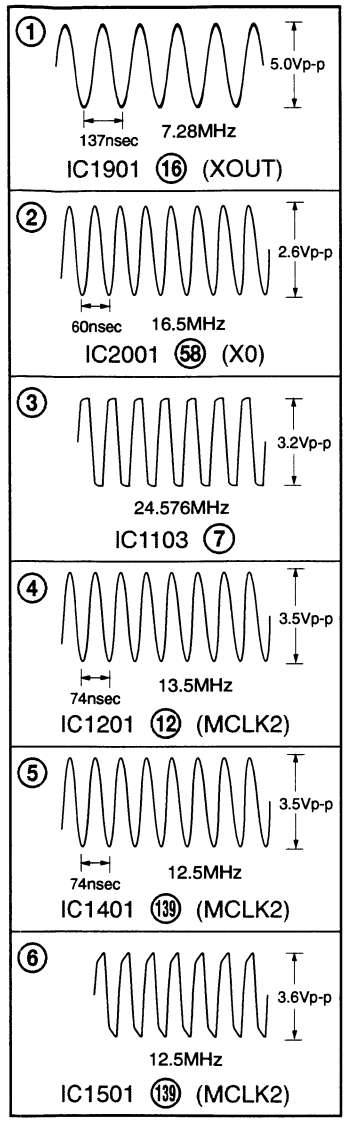




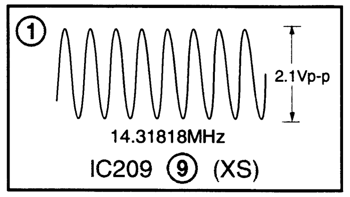
- Abbreviation
  CND : Canadian model.
  TW : Taiwan model.
  KR : Korea model.

• Waveforms

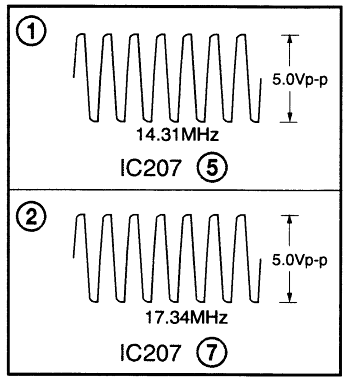
– DIGITAL Board –



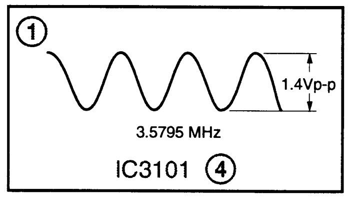
– S-VIDEO Board –



– CLOCK Board –

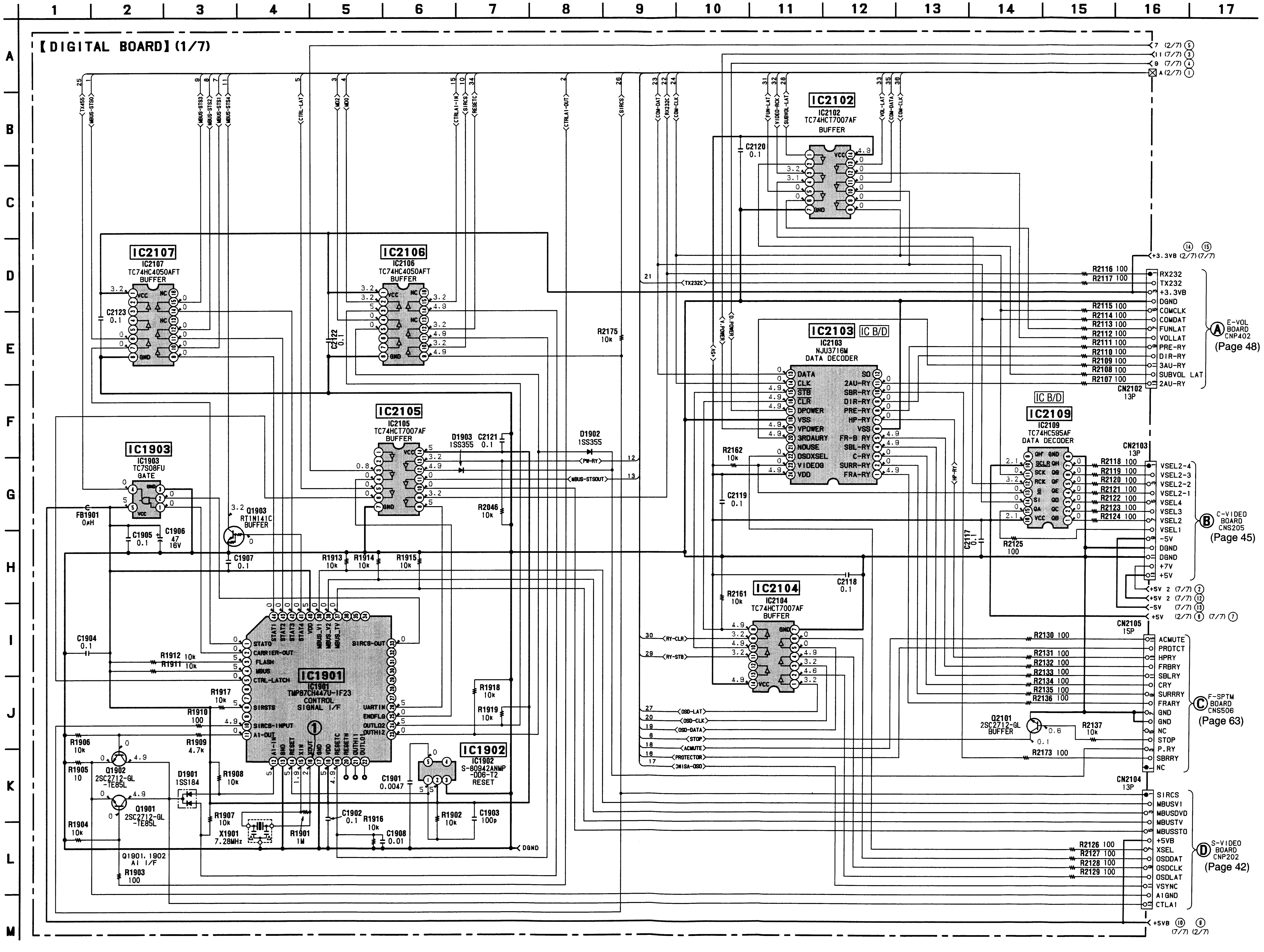


– UP CONVERT Board –



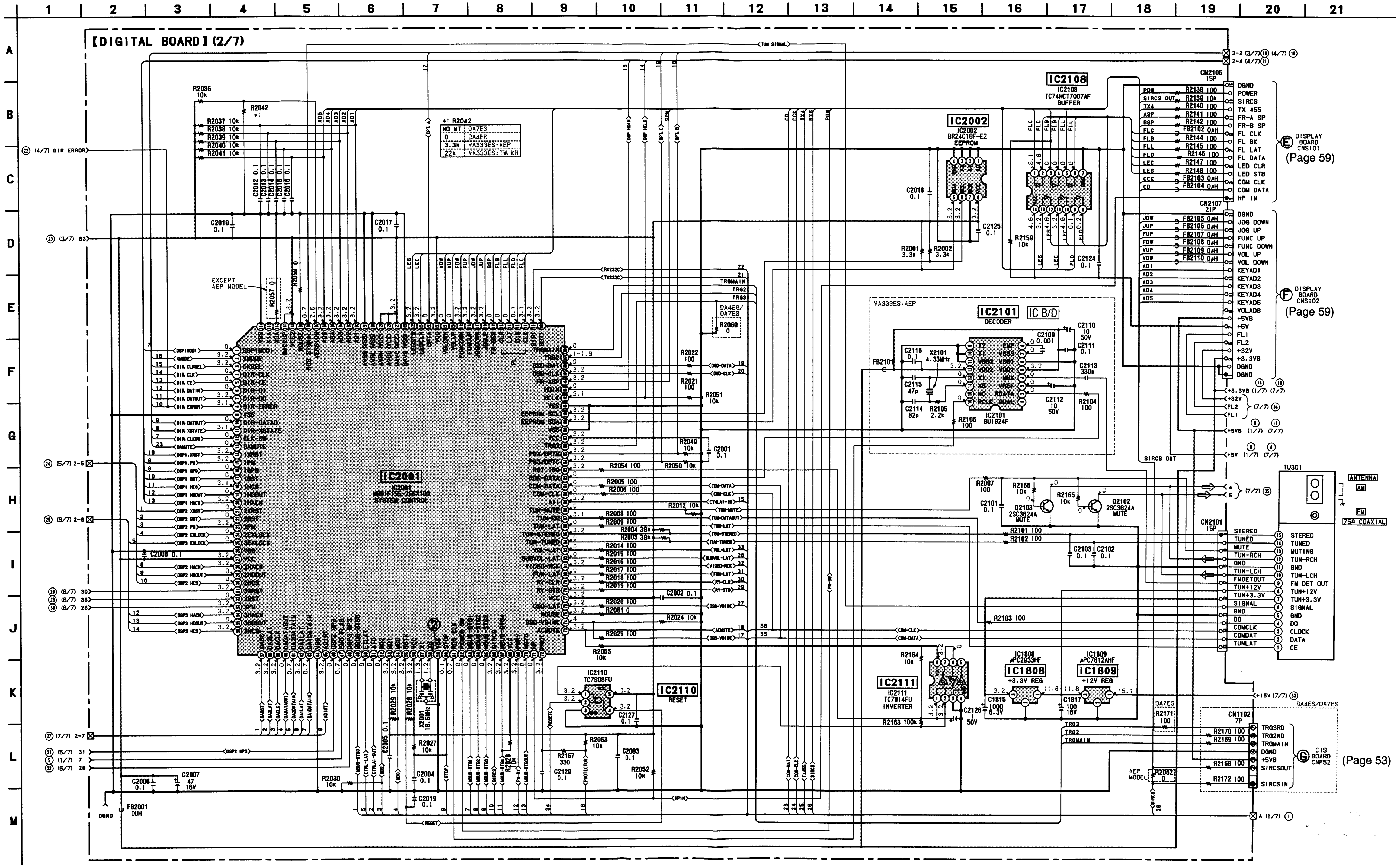
6-8. SCHEMATIC DIAGRAM — DIGITAL SECTION (1/7) —

- Refer to page 28 for Waveform.
- Refer to page 66 for IC Block Diagrams.


[DIGITAL BOARD] (1/7)
IC2107 TC74HC4050AFT BUFFER
IC2106 TC74HC4050AFT BUFFER
IC2102 TC74HCT7007AF BUFFER
IC2103 NJU3716M DATA DECODER
IC B/D
IC2109 TC74HC595AF DATA DECODER
IC2105 TC74HCT7007AF BUFFER
IC1903 TC7S08FU GATE
Q1903 RT1N141C BUFFER
IC1901 TMP87CH447U-1F23 CONTROL SIGNAL I/F
IC1902 S-80942ANMP-DD6-T2 RESET
IC2104 TC74HCT7007AF BUFFER
Q2101 2SC2712-GL BUFFER
Q1901, 1902 2SC2712-GL-TE85L AI I/F
X1901 7.28MHz
D1901 1SS184
D1902 1SS355
D1903 1SS355
FB1901 0μH
CN2102 13P
CN2103 13P
CN2104 13P
CN2105 15P
RX232
TX232
+3.3VB
DGND
COMCLK
COMDAT
FUNLAT
VOLLAT
PRE-RY
DIR-RY
3AU-RY
SUBVOL LAT
2AU-RY
Ⓐ E-VOL BOARD CNP402 (Page 48)
VSEL2-4
VSEL2-3
VSEL2-2
VSEL2-1
VSEL4
VSEL3
VSEL2
VSEL1
-5V
DGND
DGND
+7V
+5V
Ⓑ C-VIDEO BOARD CNS205 (Page 45)
ACMUTE
PROTCT
HPRY
FRBRY
SBLRY
CRY
SURRRY
FRARY
GND
GND
NC
STOP
P.RY
SBRRY
NC
Ⓒ F-SPTM BOARD CNS506 (Page 63)
SIRCS
MBUSV1
MBUSDVD
MBUSTV
MBUSSTO
+5VB
XSEL
OSDDAT
OSDCLK
OSDLAT
VSYNC
AIGND
CTLAI
Ⓓ S-VIDEO BOARD CNP202 (Page 42)
DGND

6-9. SCHEMATIC DIAGRAM — DIGITAL SECTION (2/7) —

- Refer to page 28 for Waveform.
- Refer to page 66 for IC Block Diagram.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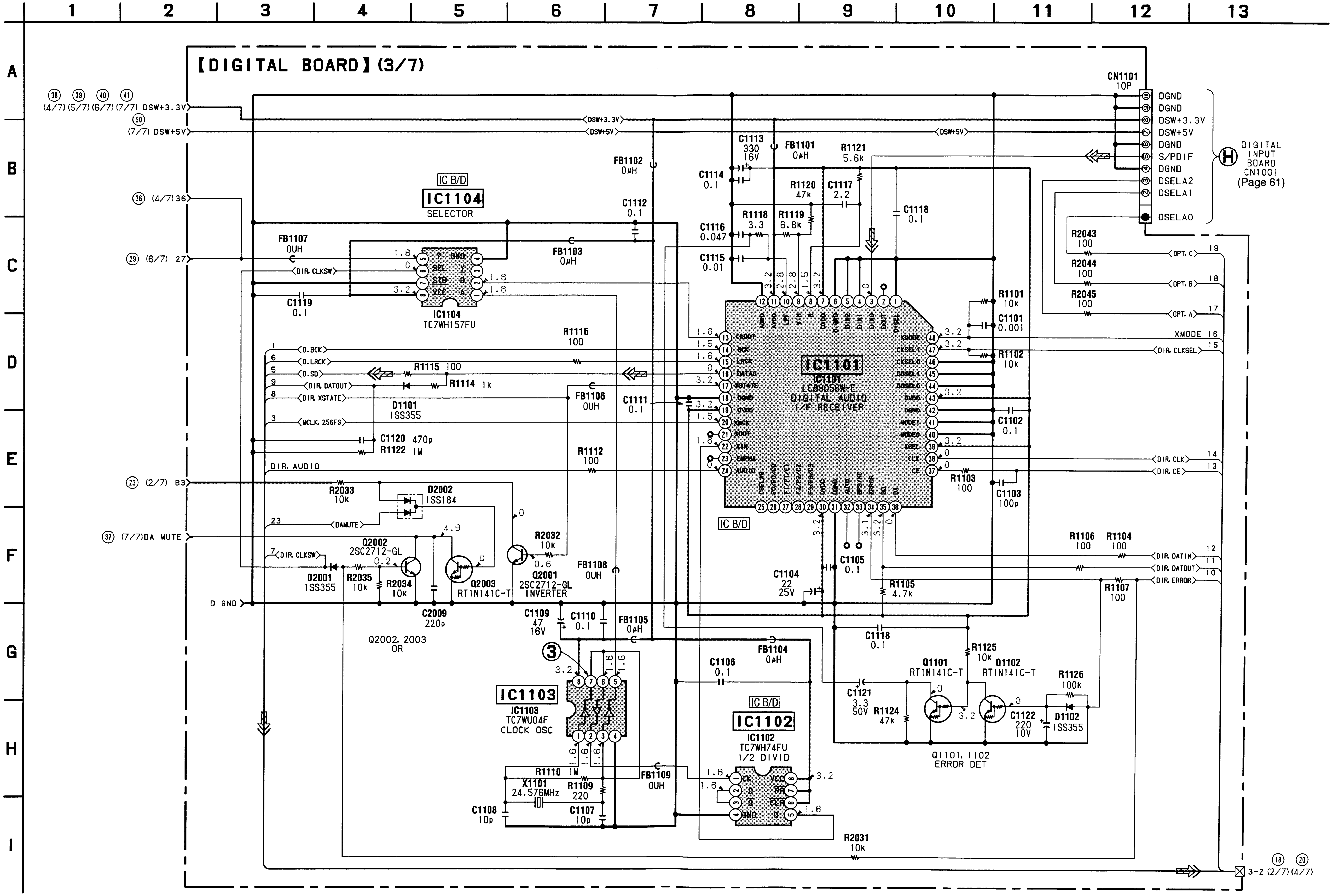
A
B
C
D
E
F
G
H
I
J
K
L
M
[DIGITAL BOARD] (2/7)
IC2001
IC2001
MB91F156-2E5X100
SYSTEM CONTROL
IC2002
IC2002
BR24C16F-E2
EEPROM
IC2108
IC2108
TC74HCT7007AF
BUFFER
IC2101
IC B/D
DECODER
IC2101
BU1924F
VA333ES:AEP
IC2110
IC2110
TC7S08FU
RESET
IC2111
IC2111
TC7W14FU
INVERTER
IC1808
μPC2933HF
+3.3V REG
IC1809
μPC7812AHF
+12V REG
*1 R2042
NO MT : DA7ES
0 : DA4ES
3.3k : VA333ES:AEP
22k : VA333ES:TW,KR
EXCEPT AEP MODEL
DA4ES/DA7ES
CN2106 15P
CN2107 21P
CN2101 15P
CN1102 7P
DISPLAY BOARD CN5101
(Page 59)
DISPLAY BOARD CN5102
(Page 59)
CIS BOARD CNP52
(Page 53)
TU301
ANTENNA
AM
FM
75Ω COAXIAL
X2101 4.33MHz
X2001 16.5MHz
DGND
FB2001

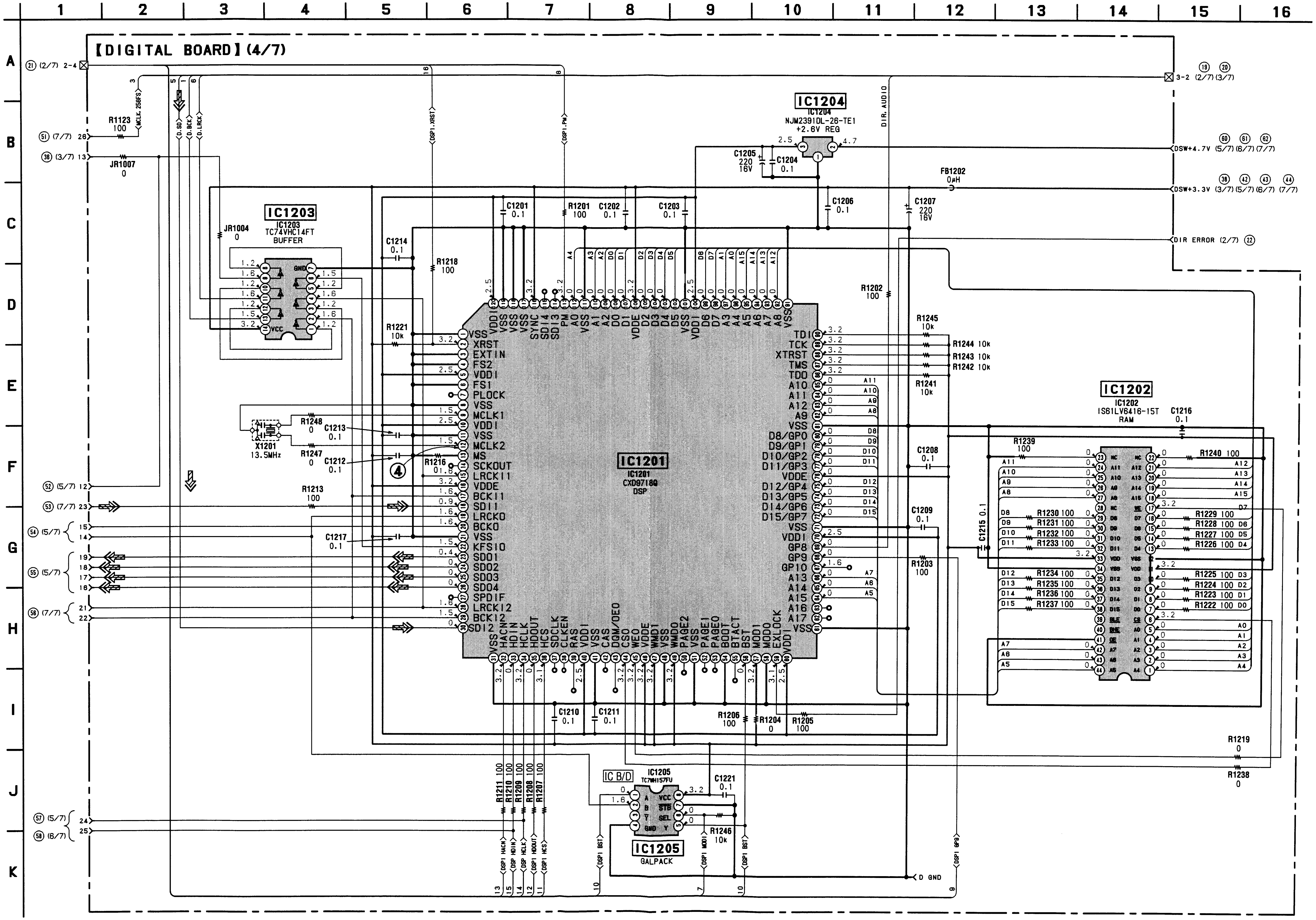
6-10. SCHEMATIC DIAGRAM — DIGITAL SECTION (3/7) —

- Refer to page 28 for Waveform.
- Refer to page 66 for IC Block Diagrams.

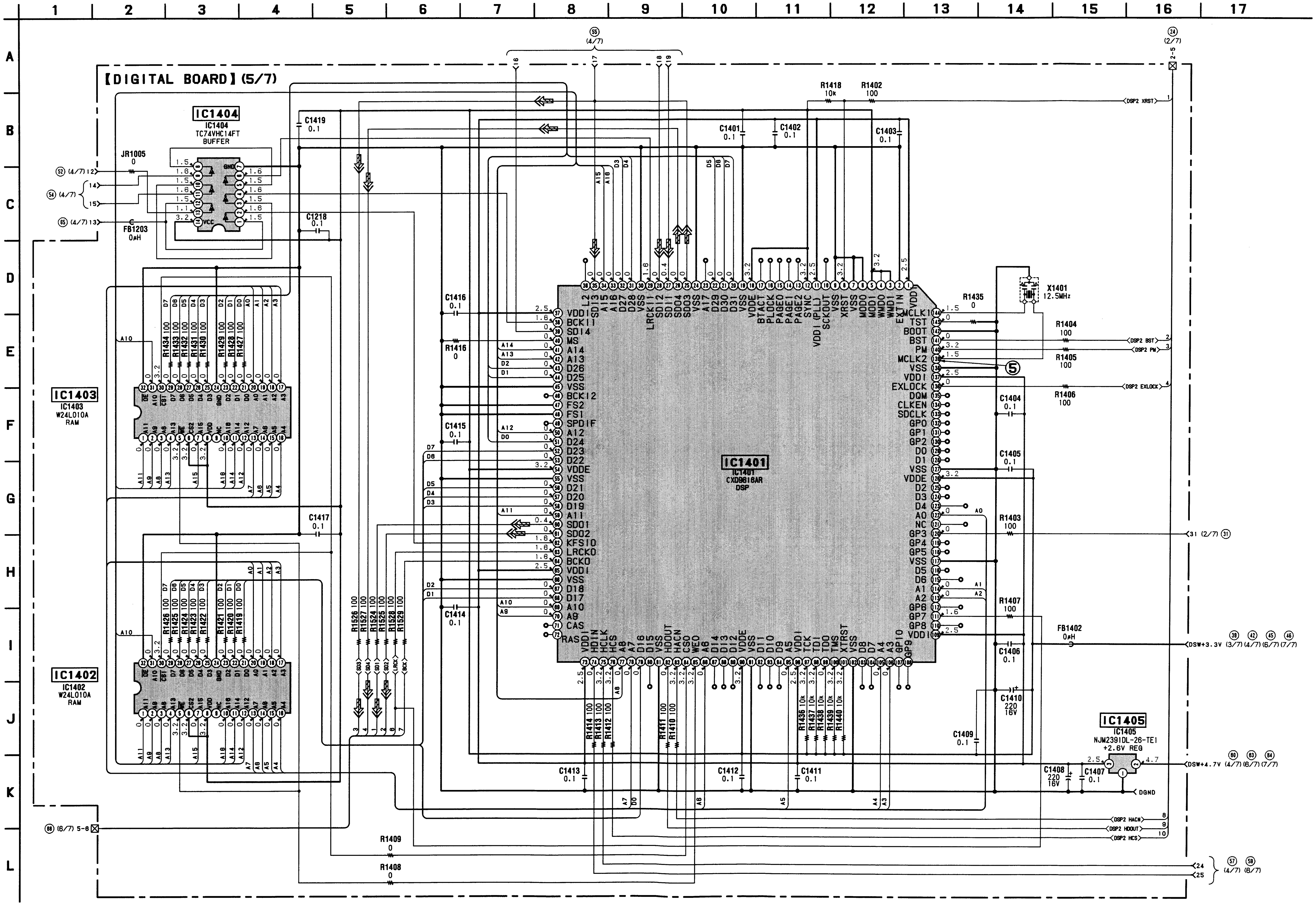

【DIGITAL BOARD】(3/7)
IC1104
SELECTOR
IC1104 TC7WH157FU
IC1101
LC89056W-E
DIGITAL AUDIO I/F RECEIVER
IC1103
TC7WU04F
CLOCK OSC
IC1102
TC7WH74FU
1/2 DIVID
IC B/D
CN1101 10P
DGND
DSW+3.3V
DSW+5V
S/PDIF
DSELA2
DSELA1
DSELA0
DIGITAL INPUT BOARD CN1001 (Page 61)
X1101 24.576MHz
Q2002 2SC2712-GL
Q2003 RT1N141C-T
Q2002, 2003 OR
Q2001 2SC2712-GL INVERTER
D2001 1SS355
D2002 1SS184
D1101 1SS355
D1102 1SS355
Q1101 RT1N141C-T
Q1102 RT1N141C-T
Q1101, 1102 ERROR DET
D GND
DIR. AUDIO
D.BCK
D.LRCK
D.SD
DIR. DATOUT
DIR. XSTATE
MCLK. 256FS
DIR. CLKSW
DAMUTE
DIR. CLKSEL
XMODE
OPT. A
OPT. B
OPT. C
DIR. CLK
DIR. CE
DIR. DATIN
DIR. DATOUT
DIR. ERROR
(4/7)(5/7)(6/7)(7/7) DSW+3.3V
(7/7) DSW+5V
(4/7) 36
(6/7) 27
(2/7) B3
(7/7) DA MUTE
3-2 (2/7)(4/7)

6-11. SCHEMATIC DIAGRAM — DIGITAL SECTION (4/7) —

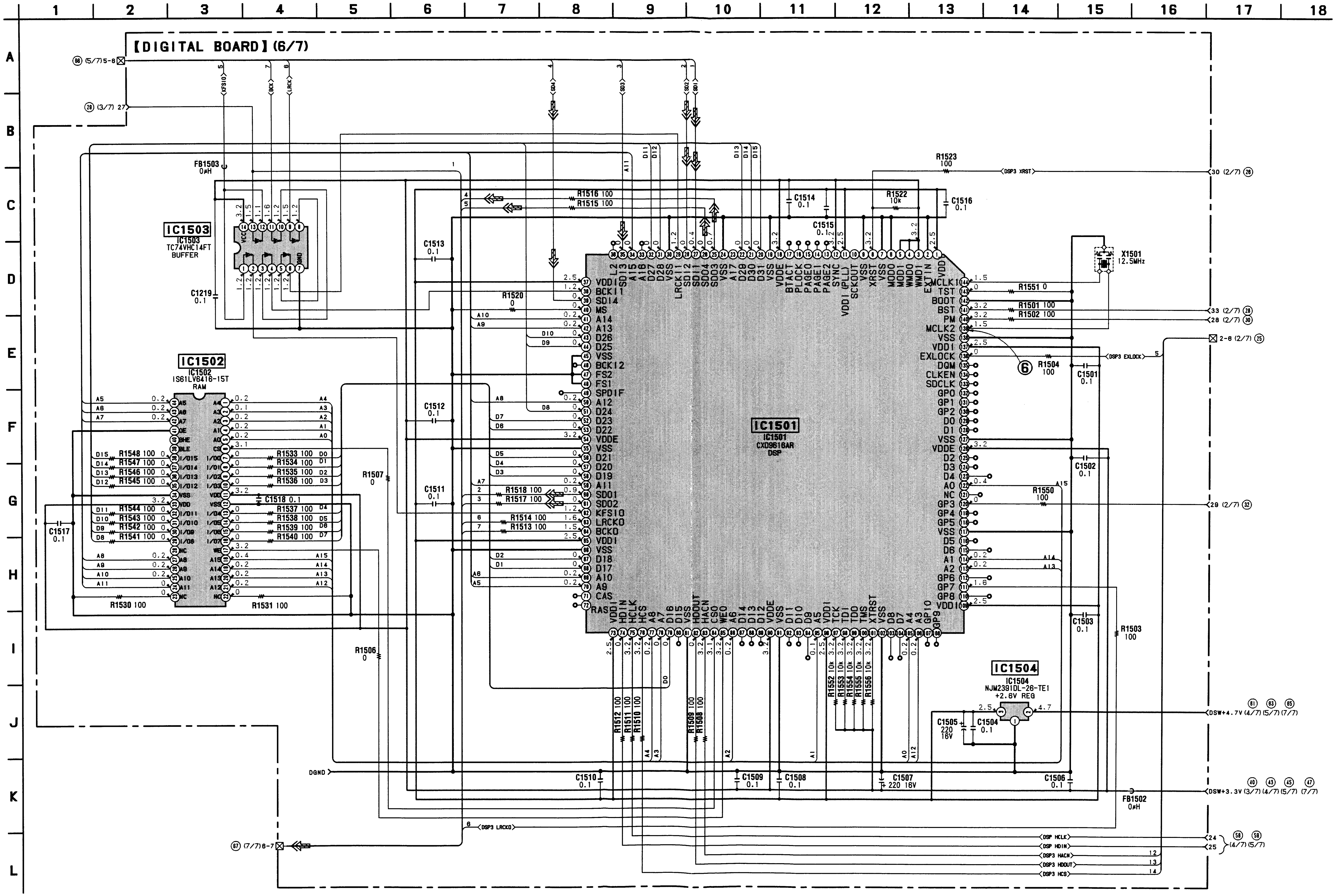
- Refer to page 28 for Waveform.
- Refer to page 66 for IC Block Diagram.


[DIGITAL BOARD] (4/7)
IC1201
IC1201
CXD9718Q
DSP
IC1202
IC1202
IS61LV6416-15T
RAM
IC1203
IC1203
TC74VHC14FT
BUFFER
IC1204
IC1204
NJM2391DL-26-TE1
+2.6V REG
IC1205
IC1205
TC7WH157FU
GALPACK
IC B/D
X1201
13.5MHz
DSW+4.7V
DSW+3.3V
DIR ERROR
D GND
DIR.AUDIO
FB1202
0μH
C1205
220
16V
C1207
220
16V
JR1007
0
JR1004
0
R1123
100
R1219
0
R1238
0
R1246
10k
④

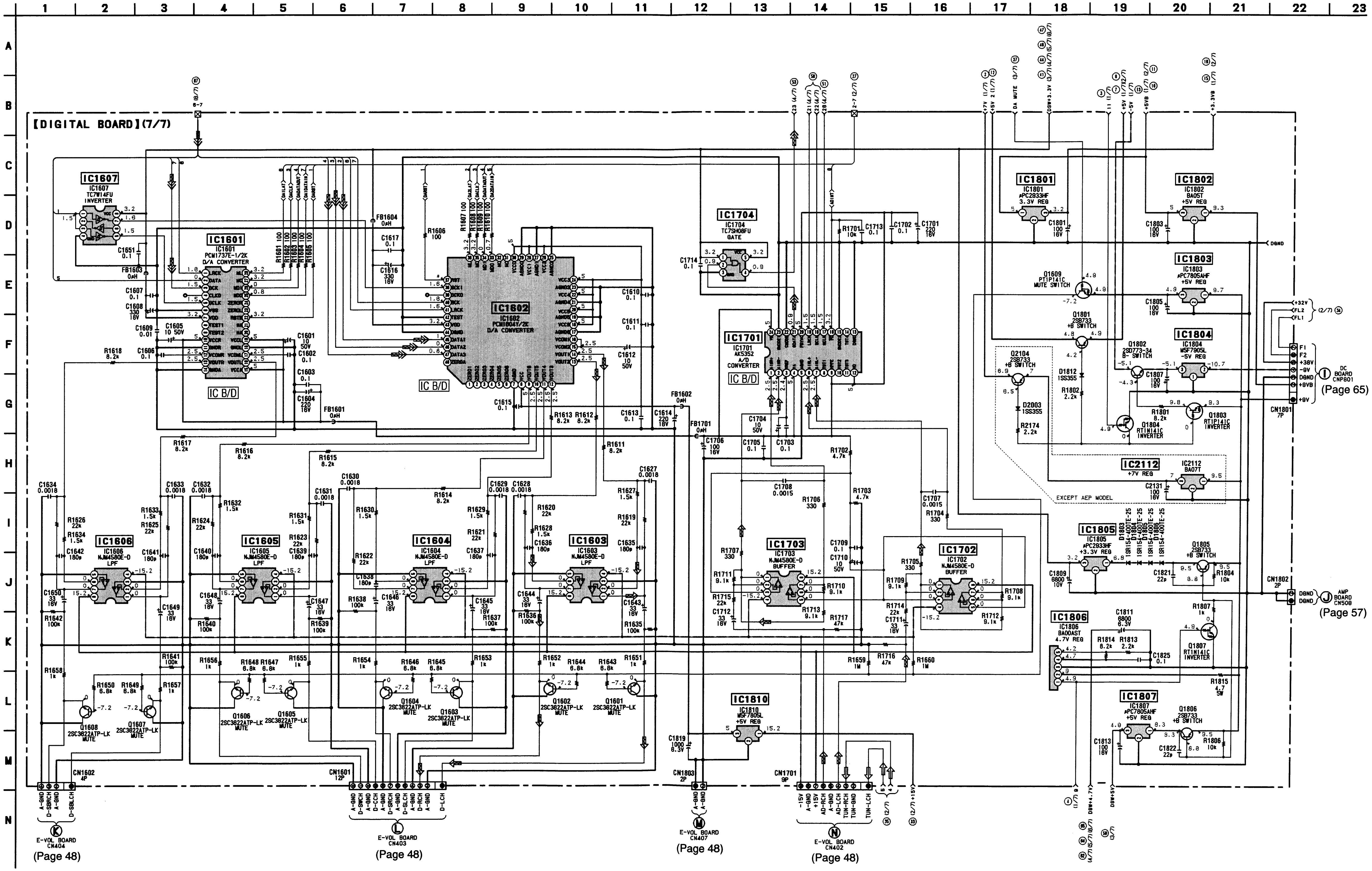
6-12. SCHEMATIC DIAGRAM — DIGITAL SECTION (5/7) — • Refer to page 28 for Waveform.


[DIGITAL BOARD] (5/7)
IC1404
IC1404 TC74VHC14FT BUFFER
IC1403
IC1403 W24L010A RAM
IC1402
IC1402 W24L010A RAM
IC1401
IC1401 CXD9618AR DSP
IC1405
IC1405 NJM2391DL-26-TE1 +2.6V REG
X1401 12.5MHz
JR1005 0
FB1203 0μH
FB1402 0μH
R1418 10k
R1402 100
R1404 100
R1405 100
R1406 100
R1435 0
R1403 100
R1407 100
R1416 0
R1409 0
R1408 0
C1419 0.1
C1218 0.1
C1416 0.1
C1415 0.1
C1417 0.1
C1414 0.1
C1401 0.1
C1402 0.1
C1403 0.1
C1404 0.1
C1405 0.1
C1406 0.1
C1410 220 16V
C1409 0.1
C1408 220 16V
C1407 0.1
C1413 0.1
C1412 0.1
C1411 0.1
DSP2 XRST
DSP2 BST
DSP2 PM
DSP2 EXLOCK
DSP2 HACN
DSP2 HDOUT
DSP2 HCS
DSW+3.3V
DSW+4.7V
DGND
31 (2/7)
(4/7)
(2/7)
(6/7) 5-8

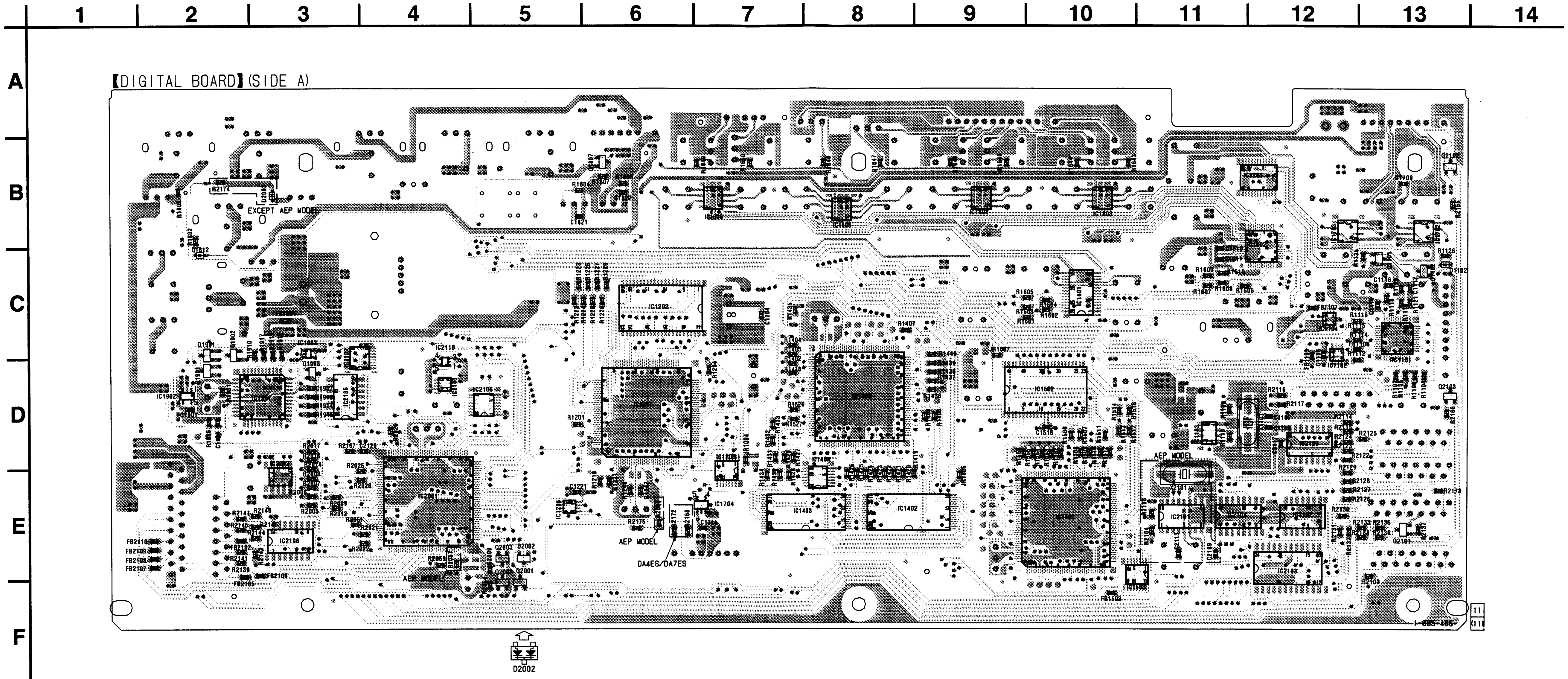
6-13. SCHEMATIC DIAGRAM — DIGITAL SECTION (6/7) — • Refer to page 28 for Waveform.


[DIGITAL BOARD] (6/7)
IC1501
CXD9616AR
DSP
IC1502
IS61LV6416-15T
RAM
IC1503
TC74VHC14FT
BUFFER
IC1504
NJM2391DL-26-TE1
+2.6V REG
X1501
12.5MHz
FB1502
0μH
FB1503
0μH
C1501
C1502
C1503
C1504
C1505 220 16V
C1506
C1507 220 16V
C1508
C1509
C1510
C1511
C1512
C1513
C1514
C1515
C1516
C1517
C1518
C1219
R1501 100
R1502 100
R1503 100
R1504 100
R1506 0
R1507 0
R1520 0
R1522 10k
R1523 100
R1550 100
R1551 0
R1530 100
R1531 100
DGND
DSP3 XRST
DSP3 EXLOCK
DSP3 LRCKO
DSP MCLK
DSP MDIN
DSP3 HACN
DSP3 HDOUT
DSP3 HCS
DSW+4.7V (4/7) (5/7) (7/7)
DSW+3.3V (3/7) (4/7) (5/7) (7/7)
KFSIO
BCK
LRCK
SD01
SD02
SD03
SD04
A B C D E F G H I J K L
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

6-14. SCHEMATIC DIAGRAM — DIGITAL SECTION (7/7) — • Refer to page 66 for IC Block Diagrams.


[DIGITAL BOARD](7/7)
IC1607 TC7W14FU INVERTER
IC1601 PCM1737E-1/2K D/A CONVERTER
IC1602 PCM1804T/2K D/A CONVERTER
IC1704 TC7SH08FU GATE
IC1701 AK5352 A/D CONVERTER
IC B/D
IC1801 μPC2933HF 3.3V REG
IC1802 BA05T +5V REG
IC1803 μPC7805AHF +5V REG
IC1804 MSF7905L -5V REG
IC2112 BA07T +7V REG
EXCEPT AEP MODEL
IC1805 μPC2933HF +3.3V REG
IC1806 BA00AST 4.7V REG
IC1807 μPC7805AHF +5V REG
IC1810 MSF7805L +5V REG
IC1606 NJM4580E-D LPF
IC1605 NJM4580E-D LPF
IC1604 NJM4580E-D LPF
IC1603 NJM4580E-D LPF
IC1703 NJM4580E-D BUFFER
IC1702 NJM4580E-D BUFFER
Q1609 RT1P141C MUTE SWITCH
Q1801 2SB733 +B SWITCH
Q2104 2SB733 +B SWITCH
Q1802 2SD773-34 B- SWITCH
Q1804 RT1N141C INVERTER
Q1803 RT1P141C INVERTER
Q1805 2SB733 +B SWITCH
Q1807 RT1N141C INVERTER
Q1806 2SB733 +B SWITCH
Q1608 2SC3622ATP-LK MUTE
Q1607 2SC3622ATP-LK MUTE
Q1606 2SC3622ATP-LK MUTE
Q1605 2SC3622ATP-LK MUTE
Q1604 2SC3622ATP-LK MUTE
Q1603 2SC3622ATP-LK MUTE
Q1602 2SC3622ATP-LK MUTE
Q1601 2SC3622ATP-LK MUTE
CN1602 4P
CN1601 12P
CN1803 2P
CN1701 9P
CN1801 7P
CN1802 2P
E-VOL BOARD CN404 (Page 48)
E-VOL BOARD CN403 (Page 48)
E-VOL BOARD CN407 (Page 48)
E-VOL BOARD CN402 (Page 48)
DC BOARD CNP801 (Page 65)
AMP BOARD CN508 (Page 57)

6-15. PRINTED WIRING BOARD — DIGITAL SECTION — • Refer to page 27 for Circuit Boards Location.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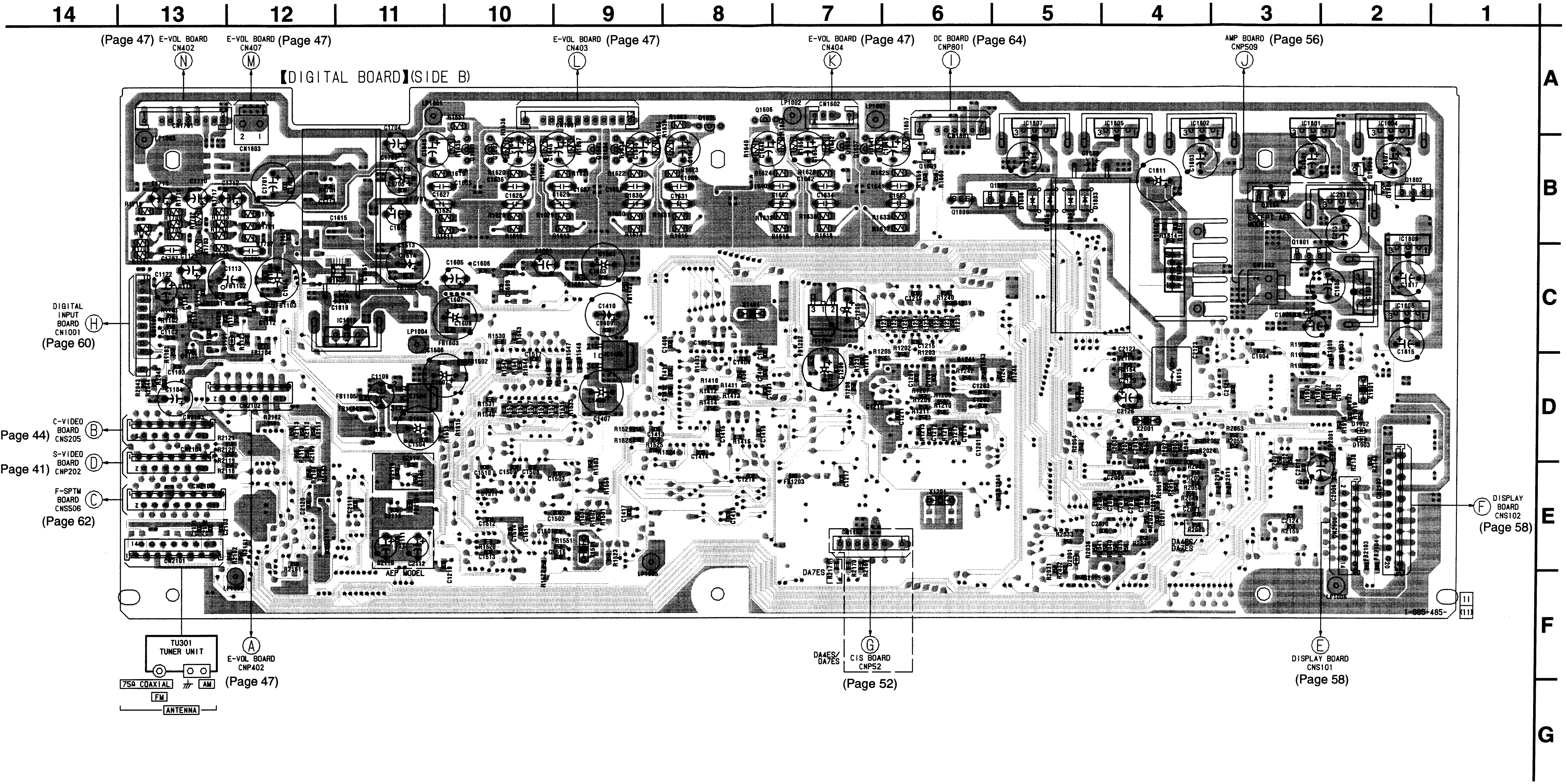
G
【DIGITAL BOARD】(SIDE A)
EXCEPT AEP MODEL
AEP MODEL
DA4ES/DA7ES
IC1202
IC1201
IC1401
IC1502
IC1601
IC1403
IC1402
IC2001
IC2103
IC2101
IC1704
D2002

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
(D1101)	C-12	IC1203	D-7	IC1702	B-13	IC2103	E-12	(Q1608)	B-7
D1102	C-13	(IC1204)	C-7	IC1703	B-12	IC2104	E-11	(Q1609)	B-6
(D1803)	B-5	IC1205	E-5	IC1704	E-7	IC2105	D-3	(Q1801)	C-3
(D1804)	B-5	IC1401	D-8	(IC1801)	A-3	IC2106	D-5	(Q1802)	B-2
(D1805)	B-5	IC1402	E-8	(IC1802)	A-4	IC2107	C-3	(Q1803)	B-2
(D1806)	B-5	IC1403	E-7	(IC1803)	C-2	IC2108	E-3	(Q1804)	B-2
D1812	C-2	IC1404	E-8	(IC1804)	A-2	IC2109	D-12	(Q1805)	B-5
D1901	D-2	(IC1405)	D-9	(IC1805)	A-4	IC2110	C-4	(Q1806)	B-6
(D1902)	D-2	IC1501	E-10	(IC1806)	C-4	IC2111	D-4	Q1807	B-6
(D1903)	D-2	IC1502	D-10	(IC1807)	A-5	(IC2112)	B-2	Q1901	C-2
(D2001)	E-5	IC1503	E-10	(IC1808)	C-2			Q1902	C-2
D2002	E-5	(IC1504)	D-11	(IC1809)	B-2	Q1101	C-13	Q1903	D-3
D2003	B-3	IC1601	C-10	(IC1810)	C-11	Q1102	C-13	Q2001	F-5
		IC1602	B-12	IC1901	D-3	(Q1601)	B-10	Q2002	F-5
IC1101	C-13	IC1603	B-10	IC1902	D-2	(Q1602)	B-10	Q2003	E-5
IC1102	C-12	IC1604	B-9	IC1903	C-3	(Q1603)	B-9	Q2101	E-13
IC1103	D-11	IC1605	B-8	IC2001	E-4	(Q1604)	B-9	Q2102	B-13
IC1104	C-12	IC1606	B-7	IC2002	E-3	(Q1605)	A-8	Q2103	D-13
IC1201	D-6	(IC1607)	C-11	IC2101	E-11	(Q1606)	A-8	(Q2104)	B-3
IC1202	C-6	IC1701	B-12	IC2102	E-12	(Q1607)	B-7		

(   ): SIDE B


【DIGITAL BOARD】(SIDE B)
14
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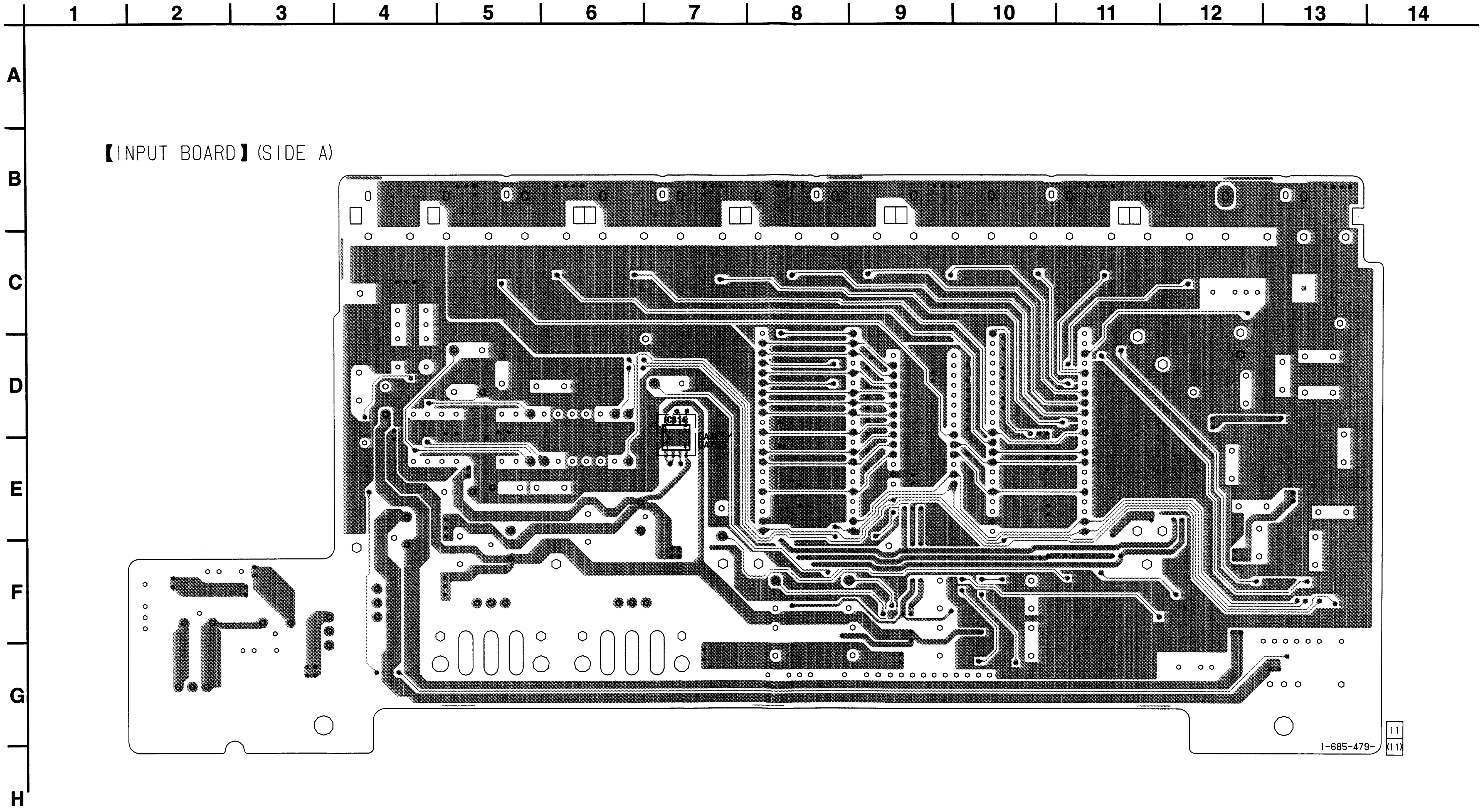
1
A
B
C
D
E
F
G
(Page 47) E-VOL BOARD CN402 N
E-VOL BOARD CN407 (Page 47) M
E-VOL BOARD CN403 (Page 47) L
E-VOL BOARD CN404 (Page 47) K
DC BOARD CNP801 (Page 64) I
AMP BOARD CNP509 (Page 56) J
DIGITAL INPUT BOARD CN1001 H (Page 60)
(Page 44) C-VIDEO BOARD CNS205 B
(Page 41) S-VIDEO BOARD CNP202 D
F-SPTM BOARD CNS506 C (Page 62)
F DISPLAY BOARD CNS102 (Page 58)
TU301 TUNER UNIT
75Ω COAXIAL
FM
AM
ANTENNA
A E-VOL BOARD CNP402 (Page 47)
DA4ES/DA7ES
G CIS BOARD CNP52 (Page 52)
E DISPLAY BOARD CNS101 (Page 58)
AEP MODEL
DA7ES
EXCEPT AEP MODEL
DA4ES/DA7ES
1-665-485-11
11

6-16. PRINTED WIRING BOARD — INPUT SECTION — • Refer to page 27 for Circuit Boards Location.


【INPUT BOARD】(SIDE A)

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C
D
E
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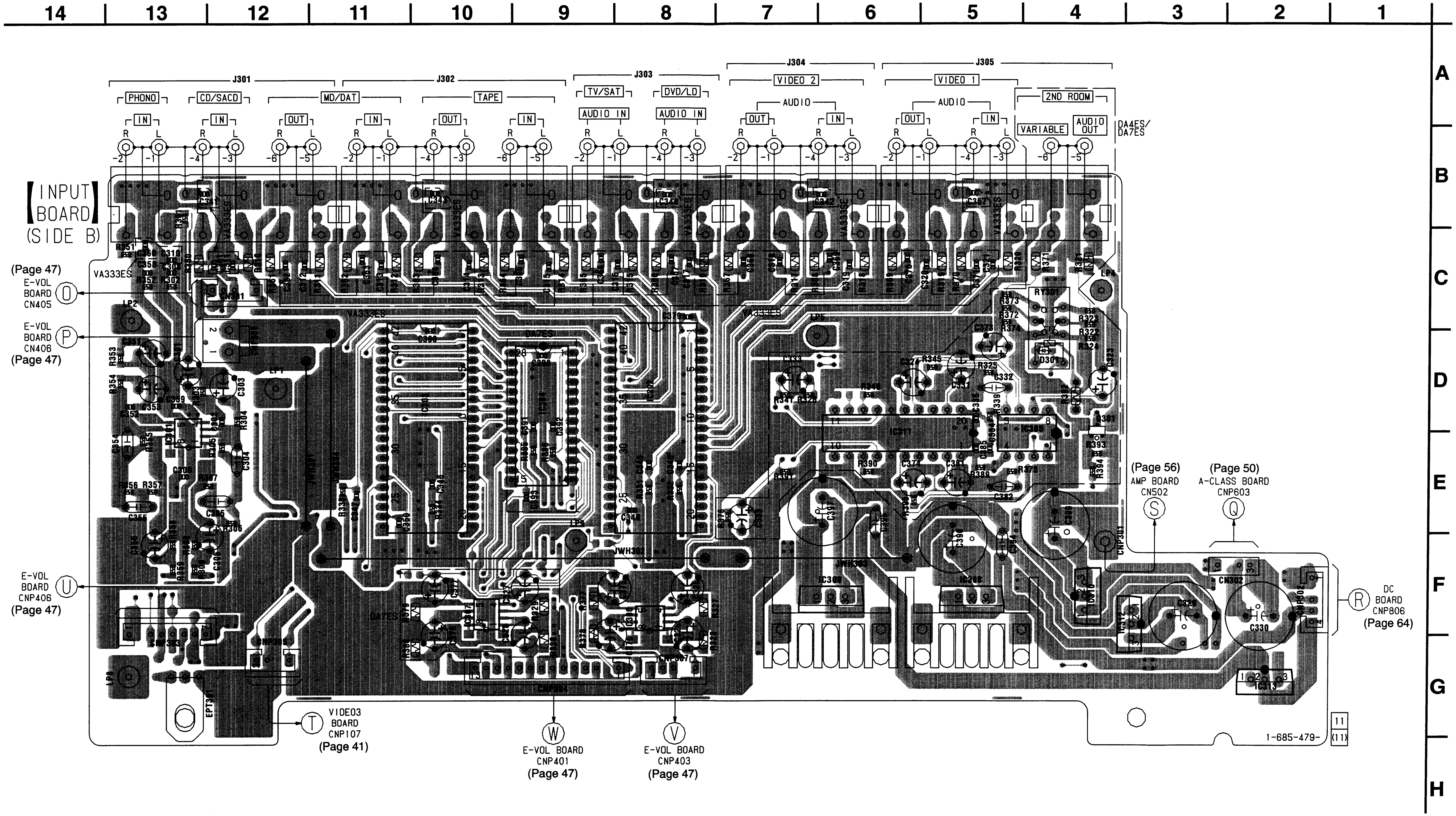
G
H
IC314
DA4ES/
DA7ES
1-685-479-
11
(11)

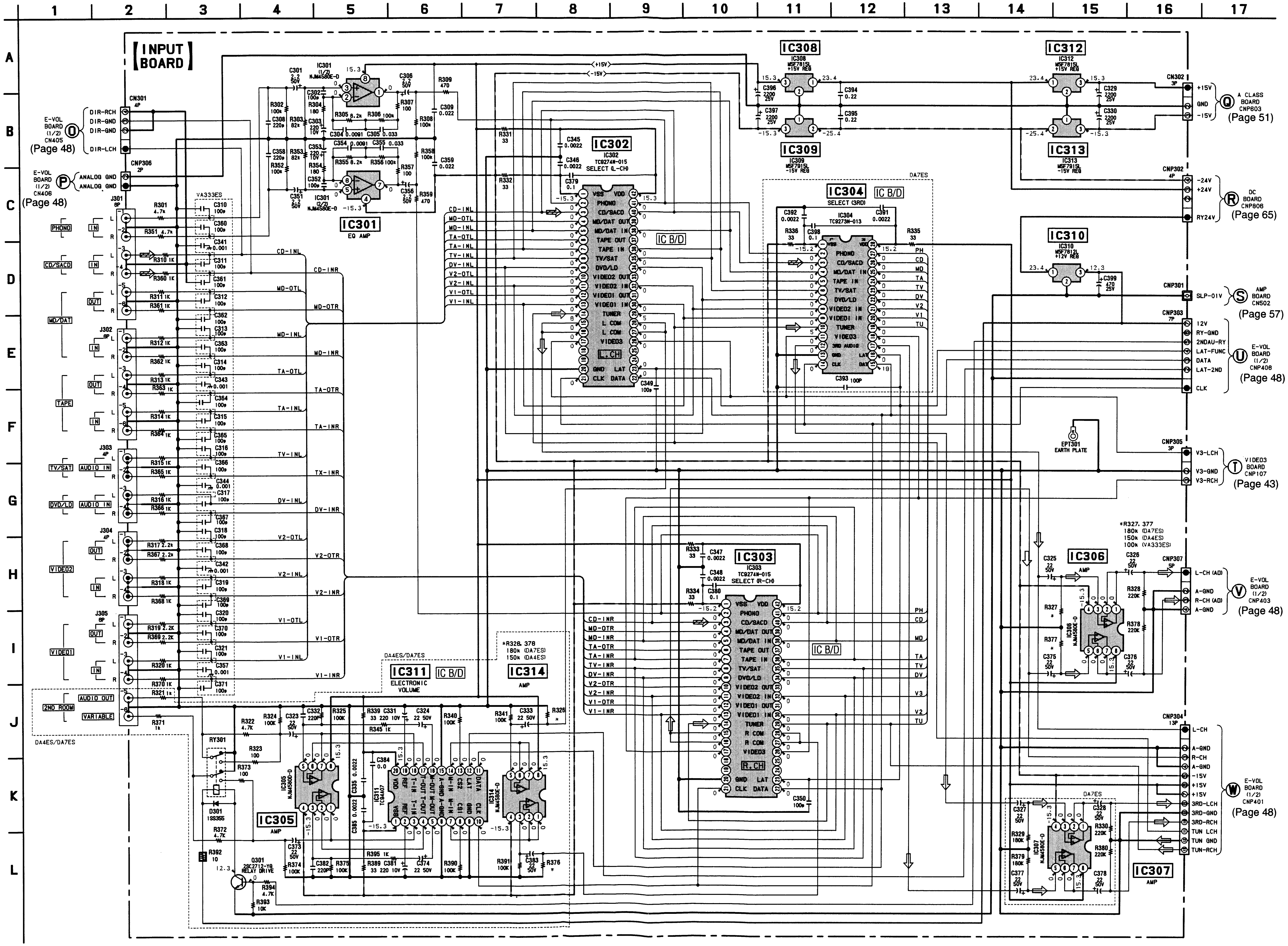

14
13
12
11
10
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
INPUT BOARD
(SIDE B)
J301
PHONO
CD/SACD
J302
MD/DAT
TAPE
J303
TV/SAT
DVD/LD
AUDIO IN
J304
VIDEO 2
J305
VIDEO 1
AUDIO
2ND ROOM
VARIABLE
AUDIO OUT
DA4ES/ DA7ES
IN
OUT
R
L
VA333ES
(Page 47) E-VOL BOARD CN405
E-VOL BOARD CN406 (Page 47)
E-VOL BOARD CNP406 (Page 47)
VIDEO3 BOARD CNP107 (Page 41)
E-VOL BOARD CNP401 (Page 47)
E-VOL BOARD CNP403 (Page 47)
(Page 56) AMP BOARD CN502
(Page 50) A-CLASS BOARD CNP603
DC BOARD CNP806 (Page 64)
1-685-479-
11
(11)

- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D301	D-4	IC308	F-5
		IC309	F-6
IC301	D-13	IC310	F-4
IC302	D-8	IC311	D-6
IC303	D-10	IC312	F-4
IC304	D-9	IC313	G-2
IC305	D-4	(IC314)	E-7
IC306	F-8		
IC307	F-10	Q301	D-4

(   ): SIDE A

6-17. SCHEMATIC DIAGRAM — INPUT SECTION — • Refer to page 68 for IC Block Diagrams.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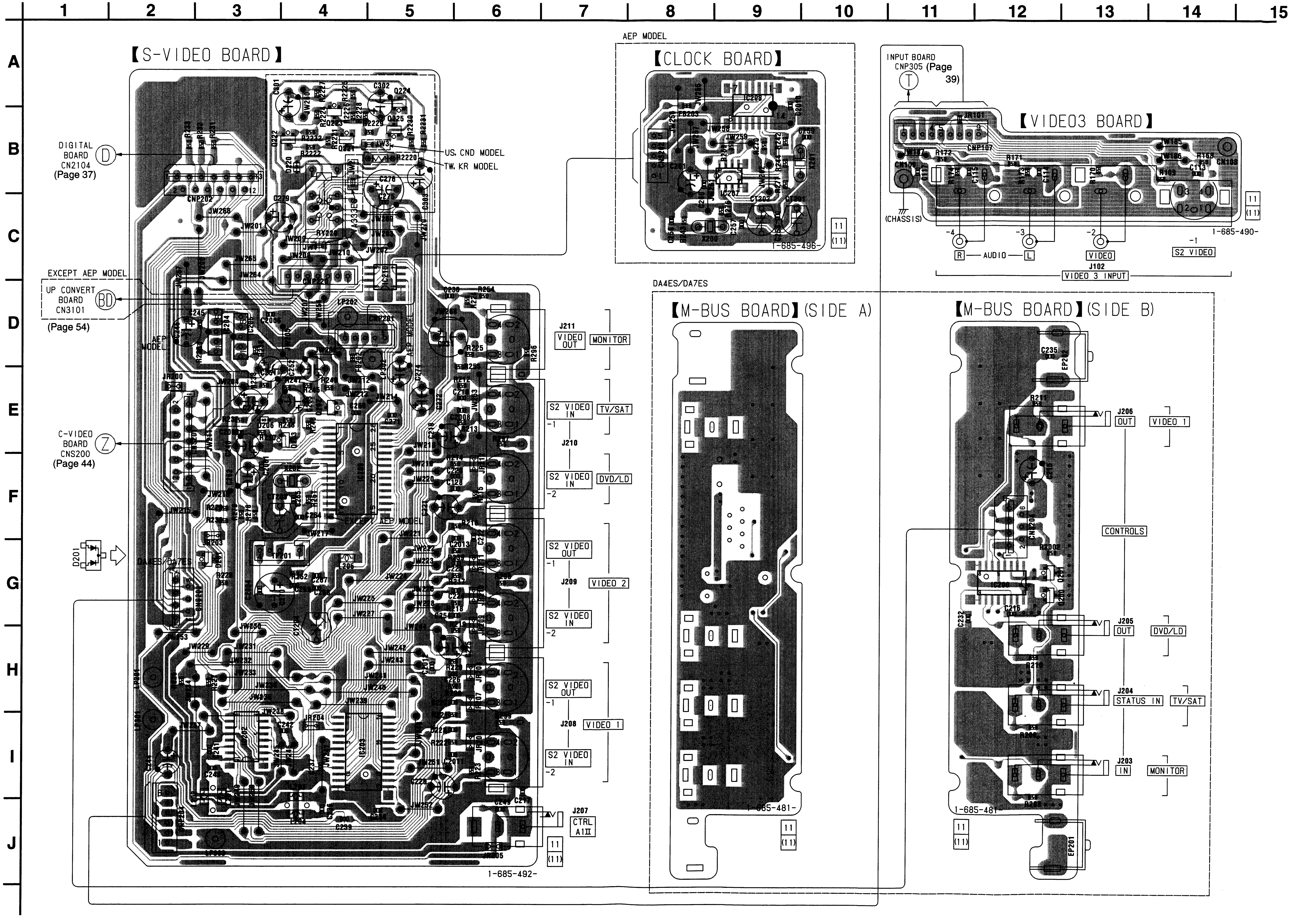
L
INPUT BOARD
CN301 4P
E-VOL BOARD (1/2) CN405 (Page 48)
DIR-RCH
DIR-GND
DIR-GND
DIR-LCH
CNP306 2P
E-VOL BOARD (1/2) CN406 (Page 48)
ANALOG GND
ANALOG GND
J301 8P
PHONO
CD/SACD
MD/DAT
J302 8P
TAPE
J303 4P
TV/SAT
AUDIO IN
DVD/LD
J304 4P
VIDEO2
J305 8P
VIDEO1
2ND ROOM
AUDIO OUT
VARIABLE
IN
OUT
DA4ES/DA7ES
VA333ES
IC301
EQ AMP
NJM4580E-D
IC302
TC9274N-015
SELECT (L-CH)
IC303
TC9274N-015
SELECT (R-CH)
IC304
SELECT (3RD)
TC9273N-013
DA7ES
IC B/D
IC305
AMP
NJM4580D-D
IC311
ELECTRONIC VOLUME
TC9440T
IC314
AMP
NJM4580E-D
IC306
AMP
NJM4580E-D
IC307
AMP
IC308
MSF7815L +15V REG
IC309
MSF7915L -15V REG
IC312
MSF7815L +15V REG
IC313
MSF7915L -15V REG
IC310
MSF7812L +12V REG
RY301
D301 1SS355
Q301 2SC2712-YG RELAY DRIVE
EPT301 EARTH PLATE
CN302 3P
+15V
GND
-15V
A CLASS BOARD CNP803 (Page 51)
CNP302 4P
-24V
+24V
RY24V
DC BOARD CNP808 (Page 65)
CNP301
SLP-01V
AMP BOARD CN502 (Page 57)
CNP303 7P
12V
RY-GND
2NDAU-RY
LAT-FUNC
DATA
LAT-2ND
CLK
E-VOL BOARD (1/2) CNP408 (Page 48)
CNP305 3P
V3-LCH
V3-GND
V3-RCH
VIDEO3 BOARD CNP107 (Page 43)
CNP307 5P
L-CH (AD)
A-GND
R-CH (AD)
A-GND
E-VOL BOARD (1/2) CNP403 (Page 48)
CNP304 13P
L-CH
A-GND
R-CH
A-GND
-15V
+15V
+15V
3RD-LCH
3RD-GND
3RD-RCH
TUN LCH
TUN GND
TUN-RCH
E-VOL BOARD (1/2) CNP401 (Page 48)
*R327, 377 180k (DA7ES) 150k (DA4ES) 100k (VA333ES)
*R326, 376 180k (DA7ES) 150k (DA4ES)
CD-INL
CD-INR
MD-OTL
MD-OTR
MD-INL
MD-INR
TA-OTL
TA-OTR
TA-INL
TA-INR
TV-INL
TX-INR
DV-INL
DV-INR
V2-OTL
V2-OTR
V2-INL
V2-INR
V1-OTL
V1-OTR
V1-INL
V1-INR
PHONO
CD/SACD
MD/DAT OUT
MD/DAT IN
TAPE OUT
TAPE IN
TV/SAT
DVD/LD
VIDEO2 OUT
VIDEO2 IN
VIDEO1 OUT
VIDEO1 IN
TUNER
L COM
R COM
VIDEO3
L.CH
R.CH
GND
LAT
CLK
DATA
VSS
VDD
PH
CD
MD
TA
TV
DV
V2
V1
V3
TU
+15V
-15V
15.3
-15.3
23.4
-23.4
25.4
-25.4
12.3
15.2
-15.2

6-18. PRINTED WIRING BOARD — S-VIDEO SECTION —

- Refer to page 43 for Semiconductor Location.
- Refer to page 27 for Circuit Boards Location.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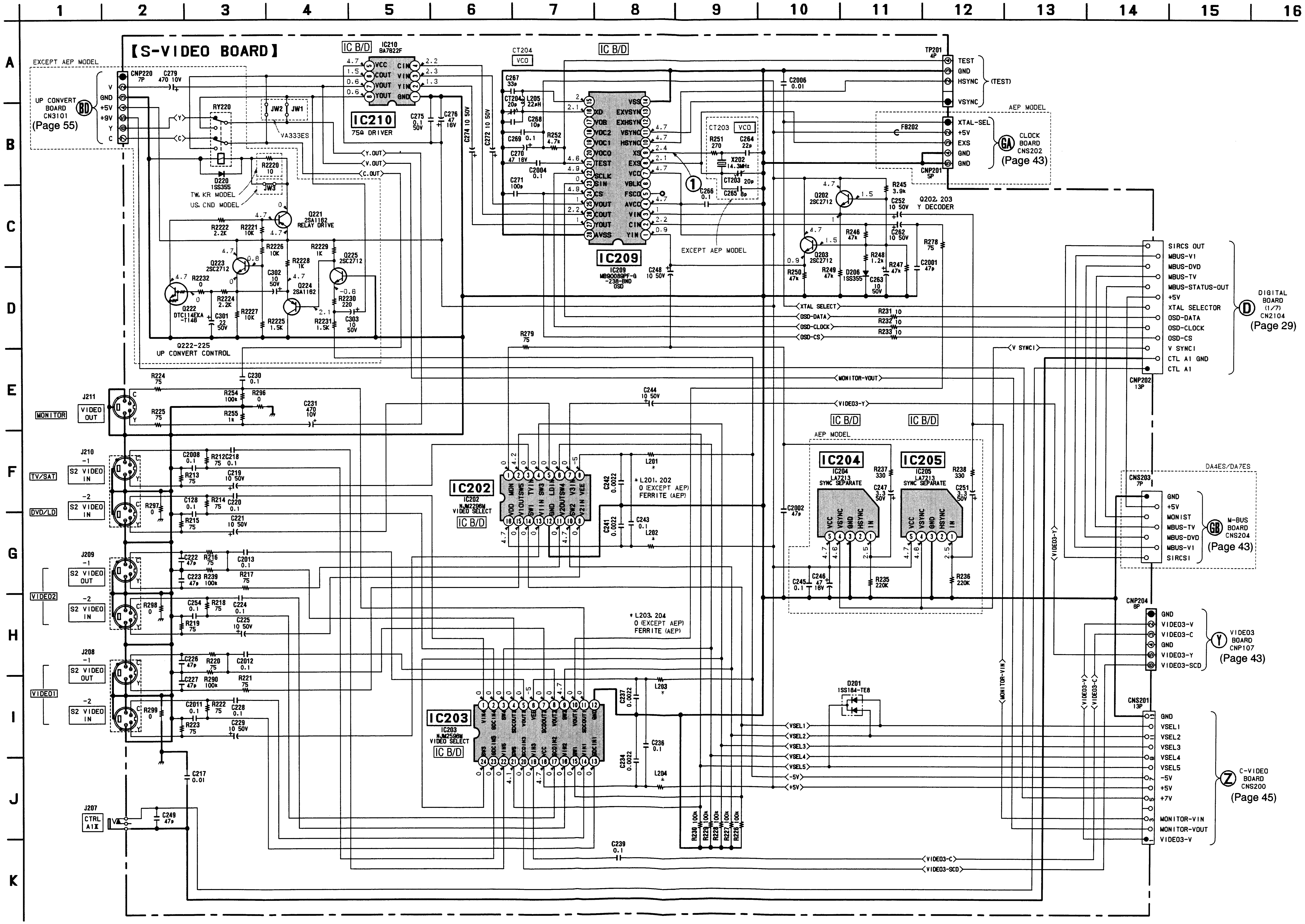
I
J
【S-VIDEO BOARD】
DIGITAL BOARD CN2104 (Page 37)
EXCEPT AEP MODEL
UP CONVERT BOARD CN3101 (Page 54)
C-VIDEO BOARD CNS200 (Page 44)
D201
AEP MODEL
DA4ES/DA7ES
US, CND MODEL
TW, KR MODEL
EXCEPT AEP MODEL
J211
VIDEO OUT
MONITOR
S2 VIDEO IN
TV/SAT
J210
S2 VIDEO IN
DVD/LD
S2 VIDEO OUT
J209
VIDEO 2
S2 VIDEO IN
S2 VIDEO OUT
J208
VIDEO 1
S2 VIDEO IN
J207
CTRL A1II
1-685-492-
11
(11)
AEP MODEL
【CLOCK BOARD】
1-685-496-
11
(11)
INPUT BOARD CNP305 (Page 39)
【VIDEO3 BOARD】
(CHASSIS)
R
AUDIO
L
VIDEO
S2 VIDEO
J102
VIDEO 3 INPUT
1-685-490-
11
(11)
DA4ES/DA7ES
【M-BUS BOARD】(SIDE A)
1-685-481-
11
(11)
【M-BUS BOARD】(SIDE B)
J206
OUT
VIDEO 1
CONTROLS
J205
OUT
DVD/LD
J204
STATUS IN
TV/SAT
J203
IN
MONITOR
1-685-481
11
(11)

- Refer to page 28 for Waveform.

6-19. SCHEMATIC DIAGRAM — S-VIDEO SECTION (1/2) —

- Refer to page 69 for IC Block Diagrams.



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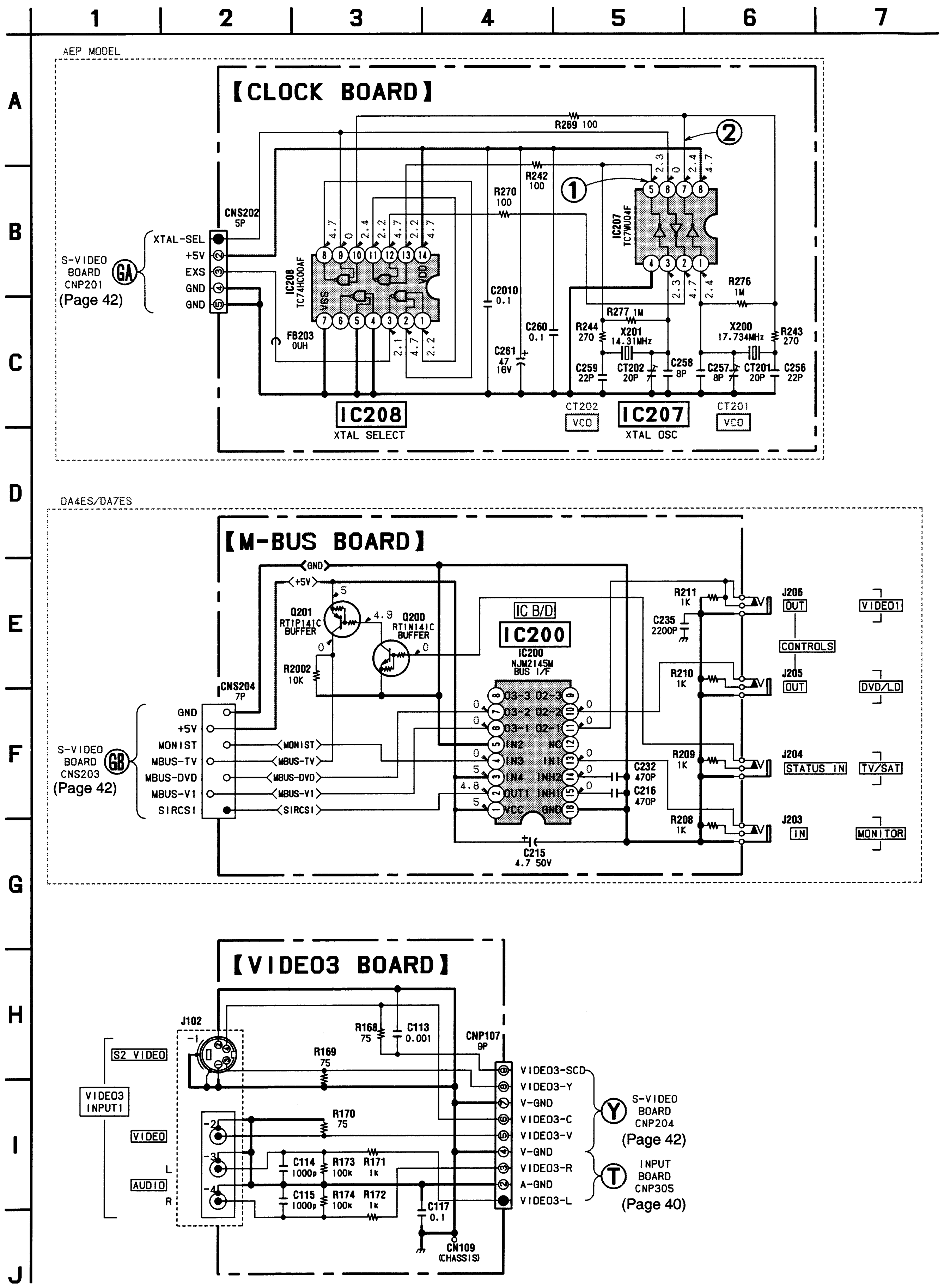
G
H
I
J
K
[S-VIDEO BOARD]
EXCEPT AEP MODEL
UP CONVERT BOARD CN3101
BD
(Page 55)
V
GND
+5V
+9V
Y
C
CNP220 7P
C279 470 10V
RY220
JW2
JW1
VA333ES
D220 1SS355
TW, KR MODEL
US, CND MODEL
R2220 10
JW3
Q221 2SA1162 RELAY DRIVE
R2222 2.2K
R2221 10K
R2226 10K
R2229 1K
Q225 2SC2712
Q223 2SC2712
R2228 1K
R2232 0
C302 10 50V
Q224 2SA1162
R2230 220
Q222 DTC114EKA -T146
R2224 2.2K
C301 22 50V
R2227 10K
R2225 1.5K
R2231 1.5K
C303 10 50V
Q222-225 UP CONVERT CONTROL
IC B/D
IC210 BA7622F
VCC
COUT
VOUT
YOUT
CIN
VIN
YIN
GND
IC210
75Ω DRIVER
C275 0.1 50V
C276 47 16V
C274 10 50V
C272 10 50V
Y.OUT
V.OUT
C.OUT
CT204 VCO
C267 33p
CT204 20p
L205 22μH
C268 10p
C269 0.1
R252 4.7k
C270 47 16V
C2004 0.1
C271 100p
IC B/D
XD
VDD
VOC2
VOC1
VOCO
TEST
SCLK
SIN
CS
VOUT
COUT
YOUT
AVSS
VSS
EXVSYN
EXHSYN
VSYNC
HSYNC
XS
EXS
VCC
VBLK
FSCO
AVCC
VIN
CIN
YIN
IC209
IC209 MB90089PF-G -238-BND OSD
C248 10 50V
CT203 VCO
R251 270
C264 22p
X202 14.3MHz
CT203 20p
C266 0.1
C265 8p
①
EXCEPT AEP MODEL
C2006 0.01
TP201 4P
TEST
GND
HSYNC
VSYNC
(TEST)
AEP MODEL
FB202
XTAL-SEL
+5V
EXS
GND
GND
CNP201 5P
GA
CLOCK BOARD CNS202
(Page 43)
Q202 2SC2712
R245 3.9k
C252 10 50V
Q202, 203 Y DECODER
R246 47k
C262 10 50V
R278 75
Q203 2SC2712
R248 1.2k
R247 47k
C2001 47p
R250 47k
R249 47k
D206 1SS355
C263 10 50V
XTAL SELECT
OSD-DATA
OSD-CLOCK
OSD-CS
R231 10
R232 10
R233 10
R279 75
V SYNC1
MONITOR-VOUT
SIRCS OUT
MBUS-VI
MBUS-DVD
MBUS-TV
MBUS-STATUS-OUT
+5V
XTAL SELECTOR
OSD-DATA
OSD-CLOCK
OSD-CS
V SYNC1
CTL A1 GND
CTL A1
CNP202 13P
D
DIGITAL BOARD (1/7) CN2104
(Page 29)
J211
MONITOR
VIDEO OUT
R224 75
R225 75
C230 0.1
R254 100k
R296 0
R255 1k
C231 470 10V
C244 10 50V
VIDEO3-Y
J210
TV/SAT
S2 VIDEO IN
DVD/LD
S2 VIDEO IN
R297 0
C2008 0.1
R212 75
C218 0.1
R213 75
C219 10 50V
C128 0.1
R214 75
C220 0.1
R215 75
C221 10 50V
IC202
IC202 NJM2286M VIDEO SELECT
IC B/D
L201
*L201, 202 0 (EXCEPT AEP) FERRITE (AEP)
C242 0.0022
C241 0.0022
C243 0.1
L202
IC B/D
IC B/D
AEP MODEL
IC204
IC204 LA7213 SYNC SEPARATE
R237 330
C247 3.3 50V
IC205
IC205 LA7213 SYNC SEPARATE
R238 330
C251 3.3 50V
VCC
VSYNC
GND
HSYNC
IN
C2002 47p
C245 0.1
C246 47 16V
R235 220K
R236 220K
DA4ES/DA7ES
CNS203 7P
GND
+5V
MONIST
MBUS-TV
MBUS-DVD
MBUS-VI
SIRCSI
GB
M-BUS BOARD CNS204
(Page 43)
J209
VIDEO2
S2 VIDEO OUT
S2 VIDEO IN
R298 0
C222 47p
R216 75
C2013 0.1
C223 47p
R239 100k
R217 75
C254 0.1
R218 75
C224 0.1
R219 75
C225 10 50V
*L203, 204 0 (EXCEPT AEP) FERRITE (AEP)
CNP204 6P
GND
VIDEO3-V
VIDEO3-C
GND
VIDEO3-Y
VIDEO3-SCD
Y
VIDEO3 BOARD CNP107
(Page 43)
J208
VIDEO1
S2 VIDEO OUT
S2 VIDEO IN
R299 0
C226 47p
R220 75
C2012 0.1
C227 47p
R290 100k
R221 75
C2011 0.1
R222 75
C228 0.1
R223 75
C229 10 50V
IC203
IC203 NJM2596M VIDEO SELECT
IC B/D
C237 0.0022
L203
C236 0.1
C234 0.0022
L204
D201 1SS184-TE8
VSEL1
VSEL2
VSEL3
VSEL4
VSEL5
-5V
+5V
MONITOR-VIN
VIDEO3-Y
VIDEO3-C
CNS201 13P
GND
VSEL1
VSEL2
VSEL3
VSEL4
VSEL5
-5V
+5V
+7V
MONITOR-VIN
MONITOR-VOUT
VIDEO3-V
Z
C-VIDEO BOARD CNS200
(Page 45)
C217 0.01
J207
CTRL A1 II
C249 47p
R230 100k
R229 100k
R228 100k
R227 100k
R226 100k
C239 0.1
VIDEO3-C
VIDEO3-SCD

6-20. SCHEMATIC DIAGRAM — S-VIDEO SECTION (2/2) —

- Refer to page 28 for Waveforms.
- Refer to page 69 for IC Block Diagram.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A
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C
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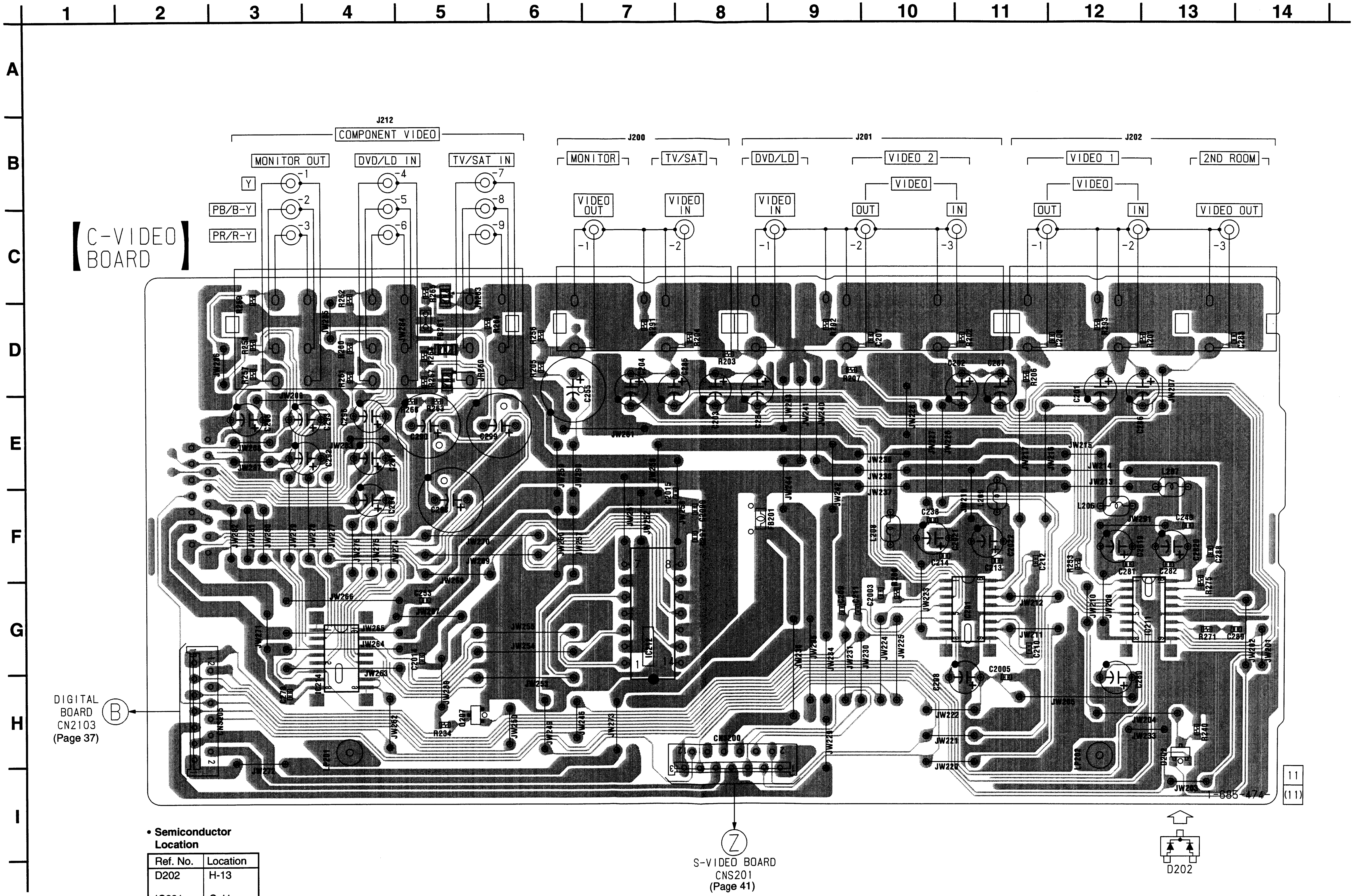
I
J
AEP MODEL
【CLOCK BOARD】
S-VIDEO BOARD
GA
CNP201
(Page 42)
XTAL-SEL
+5V
EXS
GND
GND
CNS202 5P
IC208 TC74HC00AF
FB203 0UH
R269 100
R242 100
R270 100
C2010 0.1
C260 0.1
C261 47 16V
R244 270
R277 1M
X201 14.31MHz
C259 22P
CT202 20P
C258 8P
IC207 TC7W04F
R276 1M
X200 17.734MHz
R243 270
C257 8P
CT201 20P
C256 22P
①
②
IC208
XTAL SELECT
CT202 VCO
IC207
XTAL OSC
CT201 VCO
DA4ES/DA7ES
【M-BUS BOARD】
S-VIDEO BOARD
GB
CNS203
(Page 42)
CNS204 7P
GND
+5V
MONIST
MBUS-TV
MBUS-DVD
MBUS-V1
SIRCS1
Q201 RT1P141C BUFFER
Q200 RT1N141C BUFFER
R2002 10K
IC B/D
IC200
IC200 NJM2145M BUS I/F
C215 4.7 50V
C232 470P
C216 470P
R211 1K
C235 2200P
R210 1K
R209 1K
R208 1K
J206 OUT
CONTROLS
J205 OUT
J204 STATUS IN
J203 IN
VIDEO1
DVD/LD
TV/SAT
MONITOR
【VIDEO3 BOARD】
J102
S2 VIDEO
VIDEO3 INPUT1
VIDEO
AUDIO
L
R
R168 75
C113 0.001
R169 75
R170 75
C114 1000p
R173 100k
R171 1k
C115 1000p
R174 100k
R172 1k
C117 0.1
CN109 (CHASSIS)
CNP107 9P
VIDEO3-SCD
VIDEO3-Y
V-GND
VIDEO3-C
VIDEO3-V
V-GND
VIDEO3-R
A-GND
VIDEO3-L
S-VIDEO BOARD
Y
CNP204
(Page 42)
INPUT BOARD
T
CNP305
(Page 40)

- Semiconductor Location

Ref. No.	Location
D201	G-3
D206	E-3
D220	B-4
IC200	G-12
IC202	I-3
IC203	I-4
IC204	D-3
IC205	D-3
IC207	B-9
IC208	A-9
IC209	F-4
IC210	C-5
Q200	G-12
Q201	G-12
Q202	E-4
Q203	E-4
Q221	B-4
Q222	B-4
Q223	B-4
Q224	A-5
Q225	B-5

6-21. PRINTED WIRING BOARD — C-VIDEO SECTION — • Refer to page 27 for Circuit Boards Location.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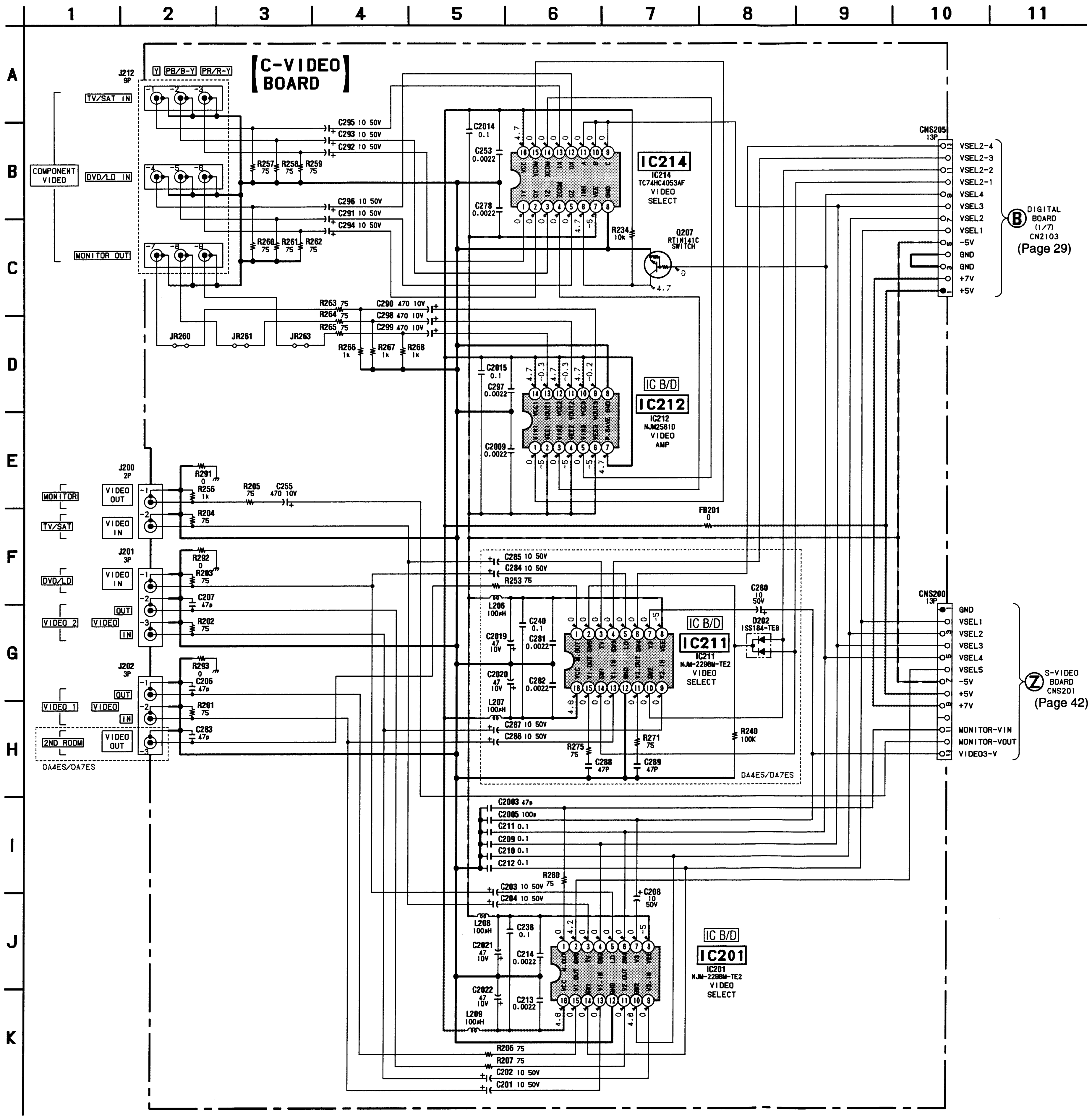
I
C-VIDEO BOARD
J212
COMPONENT VIDEO
MONITOR OUT
DVD/LD IN
TV/SAT IN
Y
PB/B-Y
PR/R-Y
-1
-2
-3
-4
-5
-6
-7
-8
-9
J200
MONITOR
TV/SAT
VIDEO OUT
VIDEO IN
J201
DVD/LD
VIDEO 2
VIDEO
OUT
IN
J202
VIDEO 1
2ND ROOM
VIDEO OUT
DIGITAL BOARD CN2103 (Page 37)
B
Z
S-VIDEO BOARD CNS201 (Page 41)
CN200
CN300
IC212
IC201
IC211
IC214
Q207
D202
1-685-474-
11
(11)

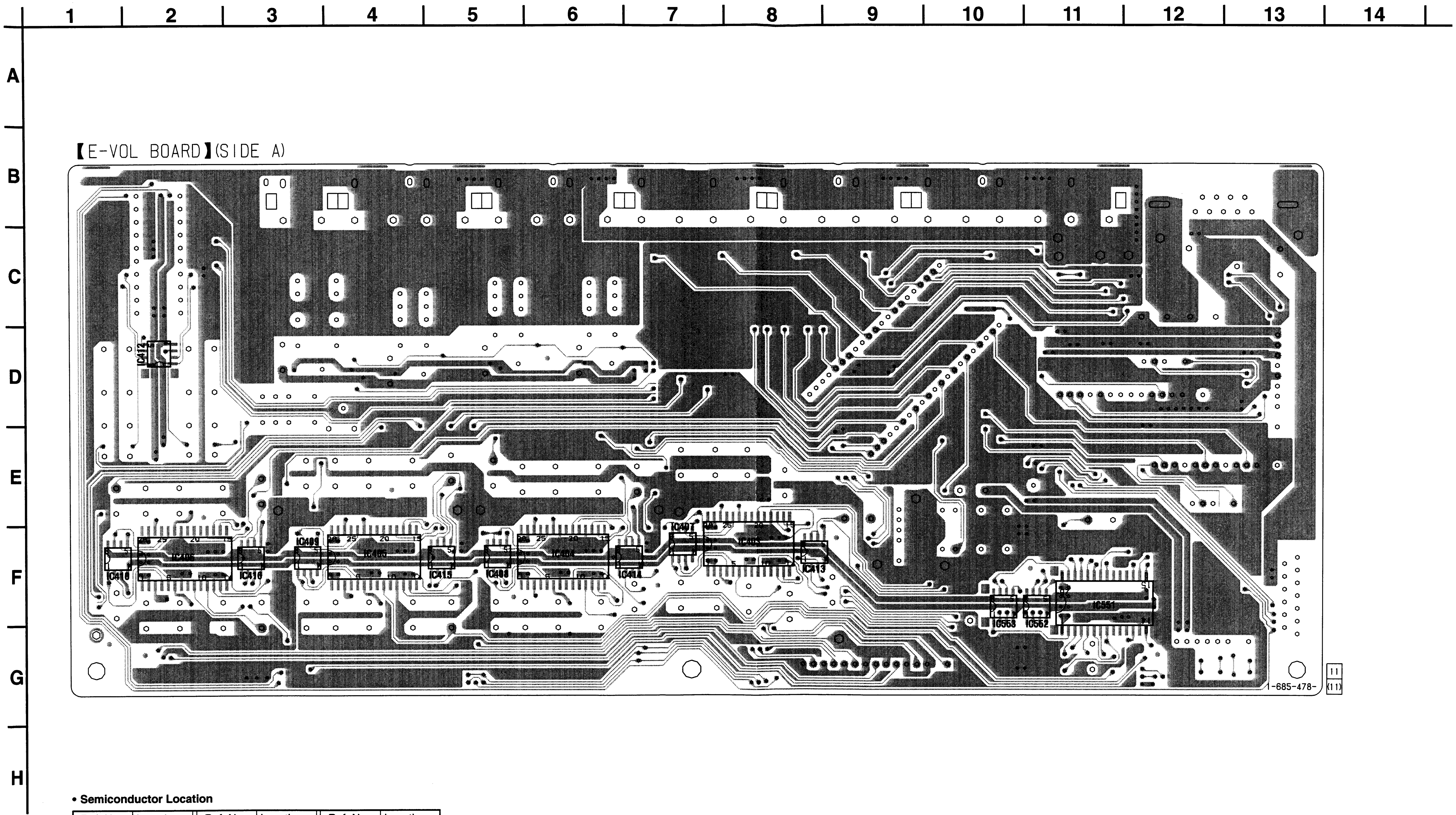
• Semiconductor Location

Ref. No.	Location
D202	H-13
IC201	G-11
IC211	G-13
IC212	G-7
IC214	H-4
Q207	H-5

6-22. SCHEMATIC DIAGRAM — C-VIDEO SECTION — • Refer to page 69 for IC Block Diagrams.


C-VIDEO BOARD
J212 9P
Y
PB/B-Y
PR/R-Y
COMPONENT VIDEO
TV/SAT IN
DVD/LD IN
MONITOR OUT
C295 10 50V
C293 10 50V
C292 10 50V
C296 10 50V
C291 10 50V
C294 10 50V
R257 75
R258 75
R259 75
R260 75
R261 75
R262 75
R263 75
R264 75
R265 75
C290 470 10V
C298 470 10V
C299 470 10V
R266 1k
R267 1k
R268 1k
JR260
JR261
JR263
C2014 0.1
C253 0.0022
C278 0.0022
IC214
IC214 TC74HC4053AF VIDEO SELECT
R234 10k
Q207 RT1N141C SWITCH
C2015 0.1
C297 0.0022
C2009 0.0022
IC B/D
IC212
IC212 NJM2581D VIDEO AMP
CNS205 13P
VSEL2-4
VSEL2-3
VSEL2-2
VSEL2-1
VSEL4
VSEL3
VSEL2
VSEL1
-5V
GND
GND
+7V
+5V
B DIGITAL BOARD (1/7) CN2103
(Page 29)
J200 2P
MONITOR
VIDEO OUT
TV/SAT
VIDEO IN
R291 0
R256 1k
R204 75
R205 75
C255 470 10V
FB201 0
J201 3P
DVD/LD
VIDEO IN
R292 0
R203 75
C207 47p
VIDEO 2
VIDEO
OUT
IN
R202 75
J202 3P
R293 0
C206 47p
VIDEO 1
VIDEO
R201 75
C283 47p
2ND ROOM
VIDEO OUT
DA4ES/DA7ES
C285 10 50V
C284 10 50V
R253 75
L206 100µH
C2019 47 10V
C240 0.1
C281 0.0022
C2020 47 10V
C282 0.0022
L207 100µH
C287 10 50V
C286 10 50V
IC211
IC211 NJM-2296M-TE2 VIDEO SELECT
C280 10 50V
D202 1SS184-TE8
R240 100K
R275 75
C288 47P
R271 75
C289 47P
DA4ES/DA7ES
CNS200 13P
GND
VSEL1
VSEL2
VSEL3
VSEL4
VSEL5
-5V
+5V
+7V
MONITOR-VIN
MONITOR-VOUT
VIDEO3-V
Z S-VIDEO BOARD CNS201
(Page 42)
C2003 47p
C2005 100p
C211 0.1
C209 0.1
C210 0.1
C212 0.1
R280 75
C203 10 50V
C204 10 50V
C208 10 50V
L208 100µH
C2021 47 10V
C238 0.1
C214 0.0022
C2022 47 10V
C213 0.0022
L209 100µH
IC201
IC201 NJM-2296M-TE2 VIDEO SELECT
R206 75
R207 75
C202 10 50V
C201 10 50V

6-23. PRINTED WIRING BOARD — E-VOL SECTION — • Refer to page 27 for Circuit Boards Location.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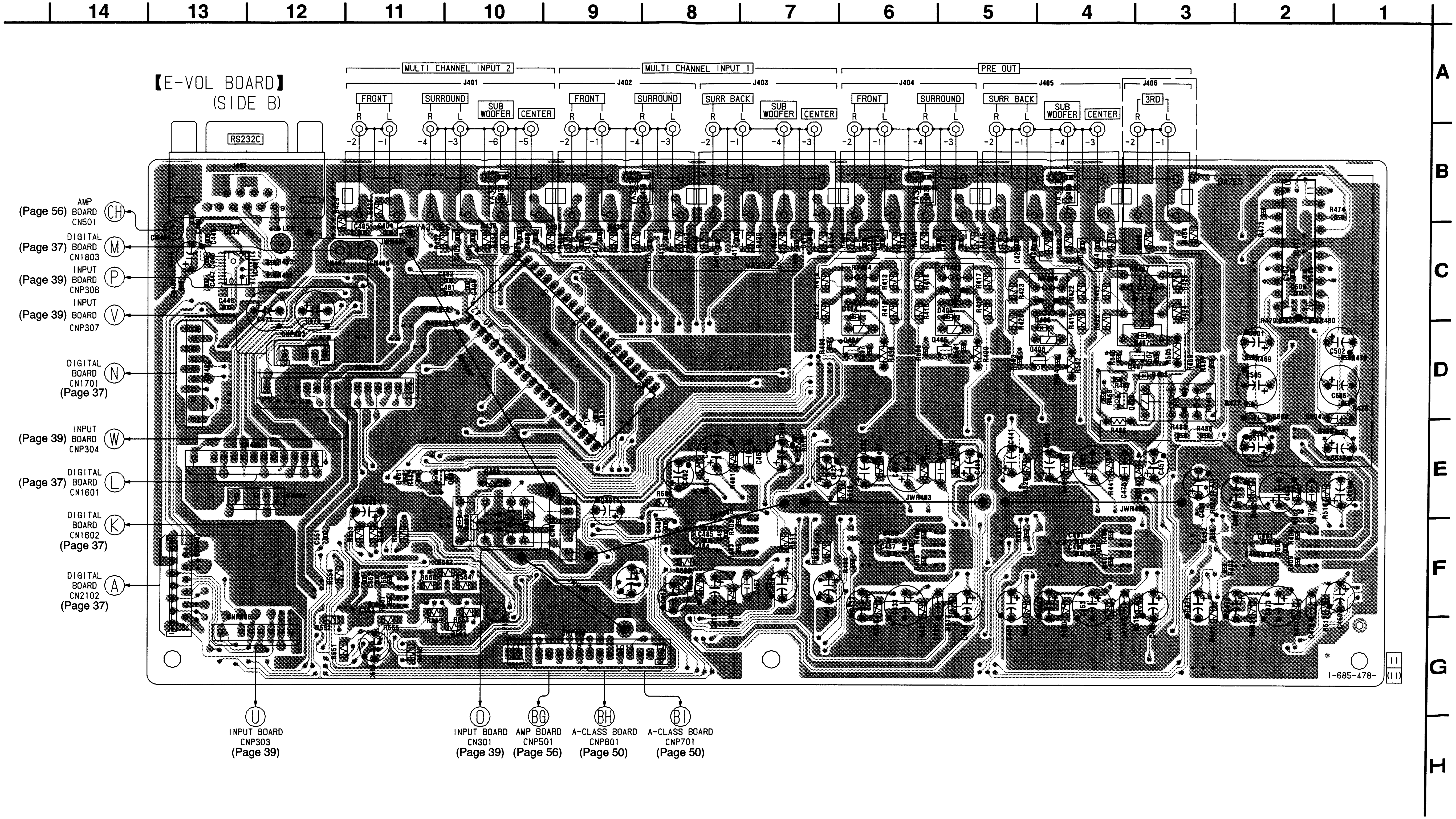
H
【E-VOL BOARD】(SIDE A)
IC412
IC410
IC406
IC416
IC409
IC405
IC415
IC408
IC404
IC414
IC407
IC403
IC413
IC553
IC552
IC551
1-685-478-
11
(11)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
(D401)	F-10	IC405	F-4	IC416	F-3
(D404)	C-6	IC406	F-2	IC551	F-11
(D405)	C-5	IC407	F-7	IC552	F-11
(D406)	D-4	IC408	F-5	IC553	F-10
(D407)	D-3	IC409	F-3		
(D408)	D-3	IC410	F-1	(Q401)	E-10
		(IC411)	C-2	(Q404)	D-6
(IC401)	C-13	IC412	D-2	(Q405)	D-5
(IC402)	D-9	IC413	F-8	(Q406)	D-4
IC403	F-8	IC414	F-6	(Q407)	D-3
IC404	F-6	IC415	F-5	(Q408)	D-4

(   ): SIDE B

【E-VOL BOARD】
(SIDE B)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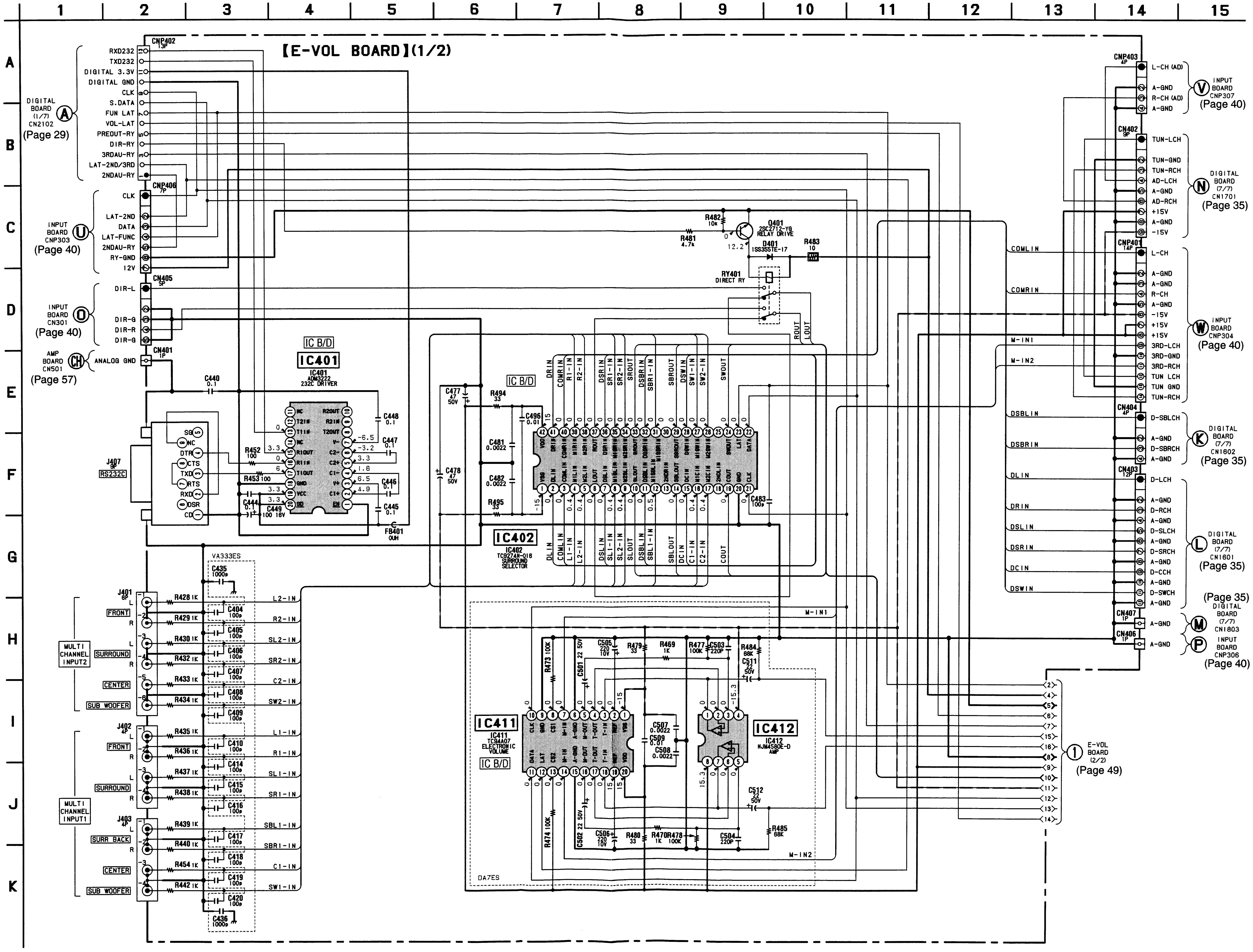
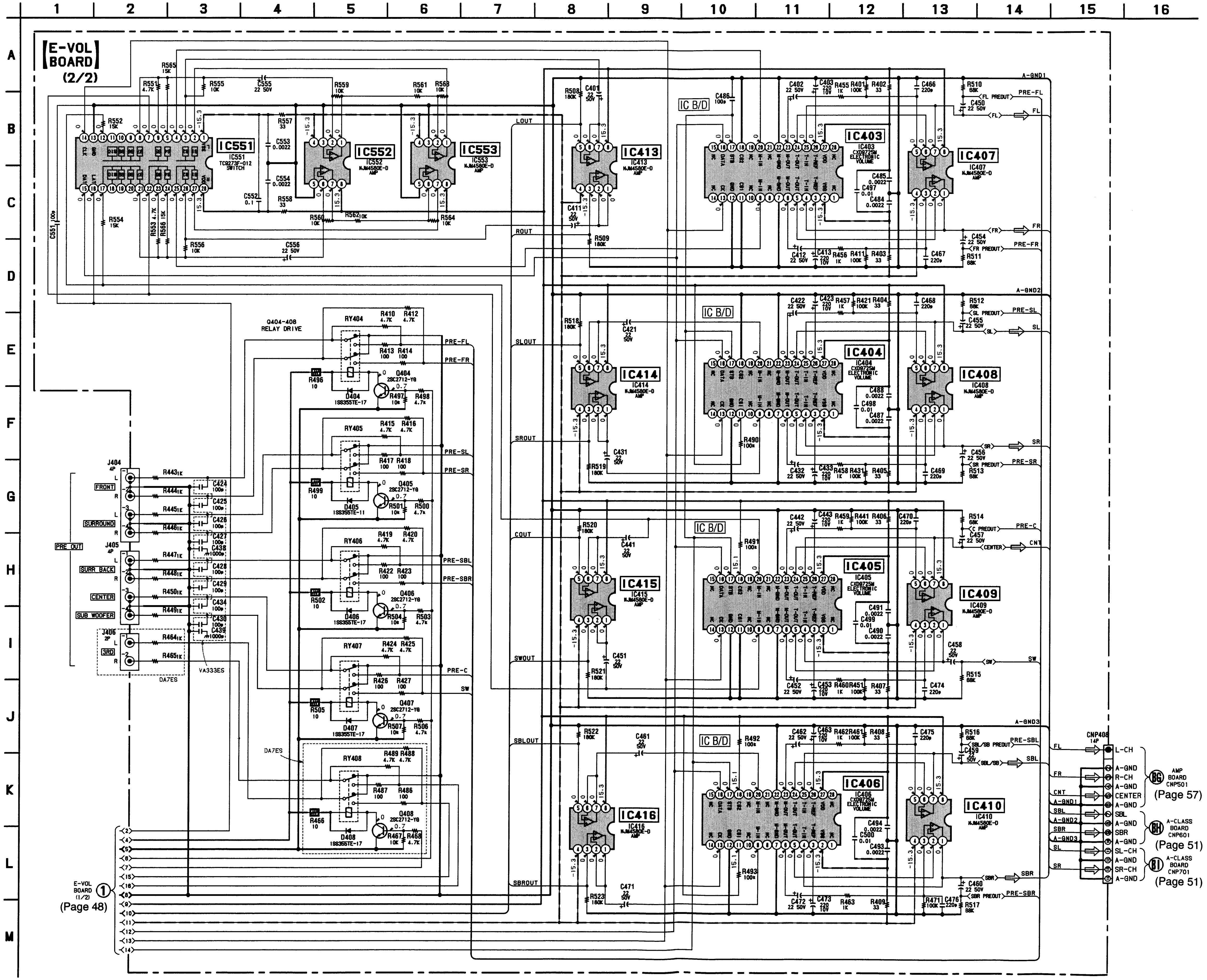
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
MULTI CHANNEL INPUT 2
MULTI CHANNEL INPUT 1
PRE OUT
J401
J402
J403
J404
J405
J406
FRONT
SURROUND
SUB WOOFER
CENTER
SURR BACK
3RD
R
L
-1
-2
-3
-4
-5
-6
RS232C
J407
DA7ES
VA333ES
JWR403
JWR404
1-685-478-
11
(11)
(Page 56) AMP BOARD CN501
CH
(Page 37) DIGITAL BOARD CN1803
M
(Page 39) INPUT BOARD CNP306
P
(Page 39) INPUT BOARD CNP307
V
DIGITAL BOARD CN1701 (Page 37)
N
(Page 39) INPUT BOARD CNP304
W
(Page 37) DIGITAL BOARD CN1601
L
DIGITAL BOARD CN1602 (Page 37)
K
DIGITAL BOARD CN2102 (Page 37)
A
U
INPUT BOARD CNP303 (Page 39)
O
INPUT BOARD CN301 (Page 39)
BG
AMP BOARD CNP501 (Page 56)
BH
A-CLASS BOARD CNP601 (Page 50)
BI
A-CLASS BOARD CNP701 (Page 50)

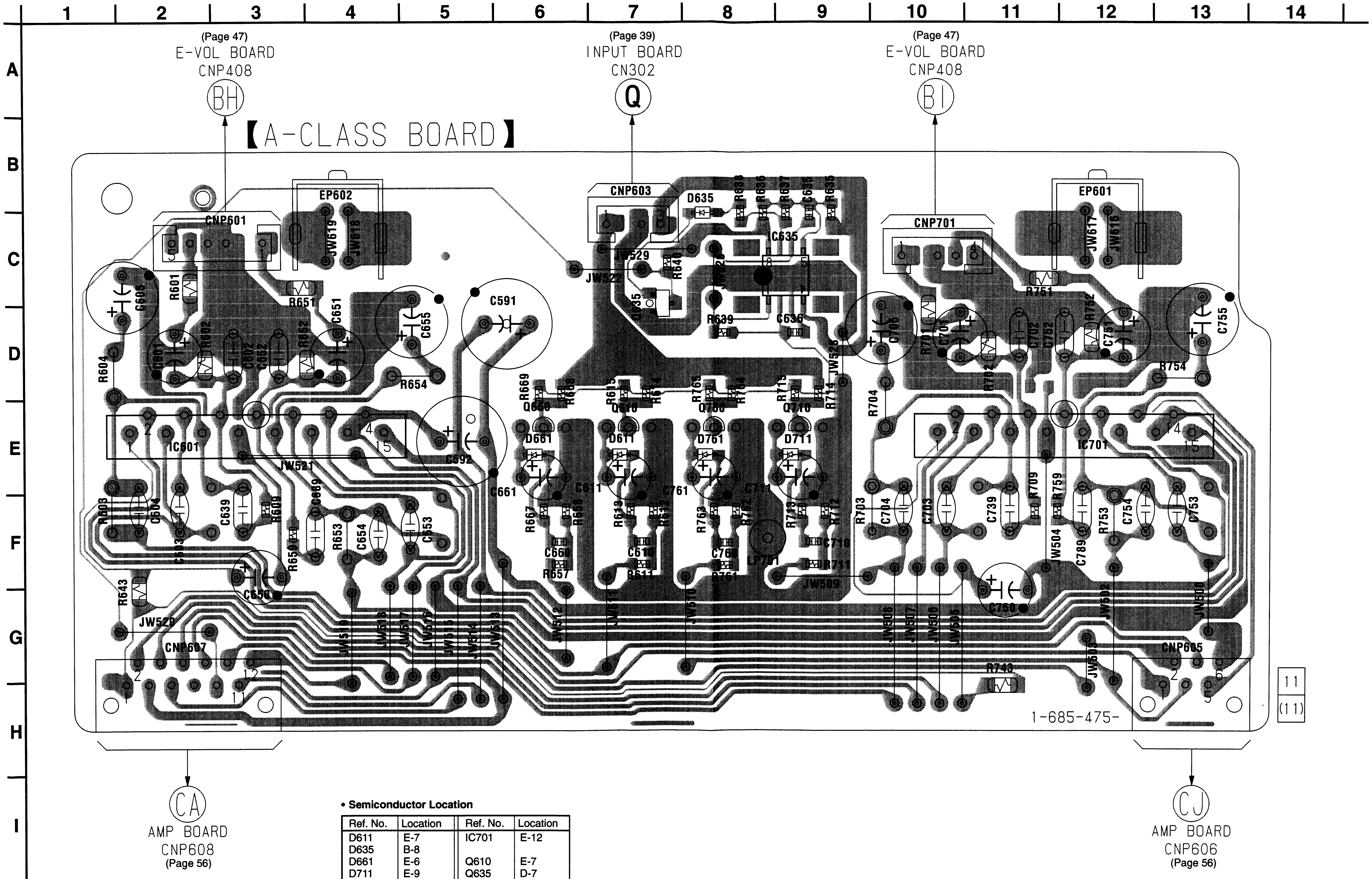
6-24. SCHEMATIC DIAGRAM — E-VOL SECTION (1/2) — • Refer to page 68 for IC Block Diagrams.


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K
[E-VOL BOARD](1/2)
DIGITAL BOARD (1/7) CN2102 (A) (Page 29)
CNP402 13P
RXD232
TXD232
DIGITAL 3.3V
DIGITAL GND
CLK
S.DATA
FUN LAT
VOL-LAT
PREOUT-RY
DIR-RY
3RDAU-RY
LAT-2ND/3RD
2NDAU-RY
INPUT BOARD CNP303 (U) (Page 40)
CNP406 7P
CLK
LAT-2ND
DATA
LAT-FUNC
2NDAU-RY
RY-GND
12V
INPUT BOARD CN301 (O) (Page 40)
CN405 5P
DIR-L
DIR-G
DIR-R
DIR-G
AMP BOARD CN501 (CH) (Page 57)
CN401 1P
ANALOG GND
IC B/D
IC401
IC401 ADM3222 232C DRIVER
C440 0.1
C448 0.1
C447 0.1
C446 0.1
C445 0.1
C444 0.1
C449 100 16V
R452 100
R453 100
FB401 0UH
J407 9P RS232C
SG NC DTR CTS TXD RTS RXD DSR CD
IC B/D
IC402
IC402 TC9274N-018 SURROUND SELECTOR
C477 47 50V
C478 47 50V
R494 33
R495 33
C496 0.01
C481 0.0022
C482 0.0022
C483 100p
DLIN COMLIN R1-IN R2-IN DSRIN SR1-IN SR2-IN SROUT DSBRIN SBR1-IN SBROUT DSWIN SW1-IN SW2-IN SWOUT
DLIN COMLIN L1-IN L2-IN DSLIN SL1-IN SL2-IN SLOUT DSBLIN SBL1-IN SBLOUT DCIN C1-IN C2-IN COUT
R482 10k
R481 4.7k
Q401 2SC2712-Y6 RELAY DRIVE
D401 1SS355TE-17
R483 10
RY401 DIRECT RY
ROUT LOUT
COMLIN COMRIN M-IN1 M-IN2 DSBLIN DSBRIN DLIN DRIN DSLIN DSRIN DCIN DSWIN
CNP403 4P
L-CH (AD)
A-GND
R-CH (AD)
A-GND
INPUT BOARD CNP307 (V) (Page 40)
CN402 9P
TUN-LCH
TUN-GND
TUN-RCH
AD-LCH
A-GND
AD-RCH
+15V
A-GND
-15V
DIGITAL BOARD (7/7) CN1701 (N) (Page 35)
CNP401 14P
L-CH
A-GND
A-GND
R-CH
A-GND
-15V
+15V
+15V
3RD-LCH
3RD-GND
3RD-RCH
TUN LCH
TUN GND
TUN-RCH
INPUT BOARD CNP304 (W) (Page 40)
CN404 4P
D-SBLCH
A-GND
D-SBRCH
A-GND
DIGITAL BOARD (7/7) CN1602 (K) (Page 35)
CN403 12P
D-LCH
A-GND
D-RCH
A-GND
D-SLCH
A-GND
D-SRCH
A-GND
D-CCH
A-GND
D-SWCH
A-GND
DIGITAL BOARD (7/7) CN1601 (L) (Page 35)
CN407 1P
A-GND
DIGITAL BOARD (7/7) CN1803 (M) (Page 35)
CN406 1P
A-GND
INPUT BOARD CNP306 (P) (Page 40)
VA333ES
C435 1000p
J401 6P
FRONT L R
SURROUND L R
CENTER
SUB WOOFER
MULTI CHANNEL INPUT2
R428 1K R429 1K R430 1K R432 1K R433 1K R434 1K
C404 100p C405 100p C406 100p C407 100p C408 100p C409 100p
L2-IN R2-IN SL2-IN SR2-IN C2-IN SW2-IN
J402 4P
FRONT L R
SURROUND L R
MULTI CHANNEL INPUT1
R435 1K R436 1K R437 1K R438 1K
C410 100p C414 100p C415 100p C416 100p
L1-IN R1-IN SL1-IN SR1-IN
J403 4P
SURR BACK L R
CENTER
SUB WOOFER
R439 1K R440 1K R454 1K R442 1K
C417 100p C418 100p C419 100p C420 100p
C436 1000p
SBL1-IN SBR1-IN C1-IN SW1-IN
IC411
IC411 TC94407 ELECTRONIC VOLUME
IC B/D
IC412
IC412 NJM4580E-D AMP
R473 100K
C501 22 50V
C505 220 10V
R479 33
R469 1K
R477 100K
C503 220P
R484 68K
C511 22 50V
C507 0.0022
C509 0.01
C508 0.0022
C512 22 50V
R474 100K
C502 22 50V
C506 220 10V
R480 33
R470 1K
R478 100K
C504 220P
R485 68K
M-IN1
M-IN2
DA7ES
E-VOL BOARD (2/2) (1) (Page 49)
2 4 5 6 7 15 16 8 9 10 11 12 13 14

6-25. SCHEMATIC DIAGRAM — E-VOL SECTION (2/2) — • Refer to page 71 for IC Block Diagrams.


E-VOL BOARD (2/2)
IC551 TC9273F-012 SWITCH
IC552 NJM4580E-D AMP
IC553 NJM4580E-D AMP
IC413 NJM4580E-D AMP
IC414 NJM4580E-D AMP
IC415 NJM4580E-D AMP
IC416 NJM4580E-D AMP
IC403 CXD9725M ELECTRONIC VOLUME
IC404 CXD9725M ELECTRONIC VOLUME
IC405 CXD9725M ELECTRONIC VOLUME
IC406 CXD9725M ELECTRONIC VOLUME
IC407 NJM4580E-D AMP
IC408 NJM4580E-D AMP
IC409 NJM4580E-D AMP
IC410 NJM4580E-D AMP
IC B/D
Q404-408 RELAY DRIVE
RY404
RY405
RY406
RY407
RY408
Q404 2SC2712-YG
Q405 2SC2712-YG
Q406 2SC2712-YG
Q407 2SC2712-YG
Q408 2SC2712-YG
D404 1SS355TE-17
D405 1SS355TE-17
D406 1SS355TE-17
D407 1SS355TE-17
D408 1SS355TE-17
LOUT
ROUT
SLOUT
SROUT
COUT
SWOUT
SBLOUT
SBROUT
PRE-FL
PRE-FR
PRE-SL
PRE-SR
PRE-C
PRE-SBL
PRE-SBR
SW
FL
FR
SL
SR
CNT
SBL
SBR
A-GND1
A-GND2
A-GND3
J404 4P
FRONT
SURROUND
PRE OUT
J405 4P
SURR BACK
CENTER
SUB WOOFER
J406 2P
3RD
DA7ES
VA333ES
E-VOL BOARD ① (1/2)
(Page 48)
CNP408 14P
L-CH
A-GND
R-CH
CENTER
SBL
SBR
SL-CH
SR-CH
BG AMP BOARD CNP501
(Page 57)
BH A-CLASS BOARD CNP601
(Page 51)
BI A-CLASS BOARD CNP701
(Page 51)

6-26. PRINTED WIRING BOARD — A-CLASS SECTION — • Refer to page 27 for Circuit Boards Location.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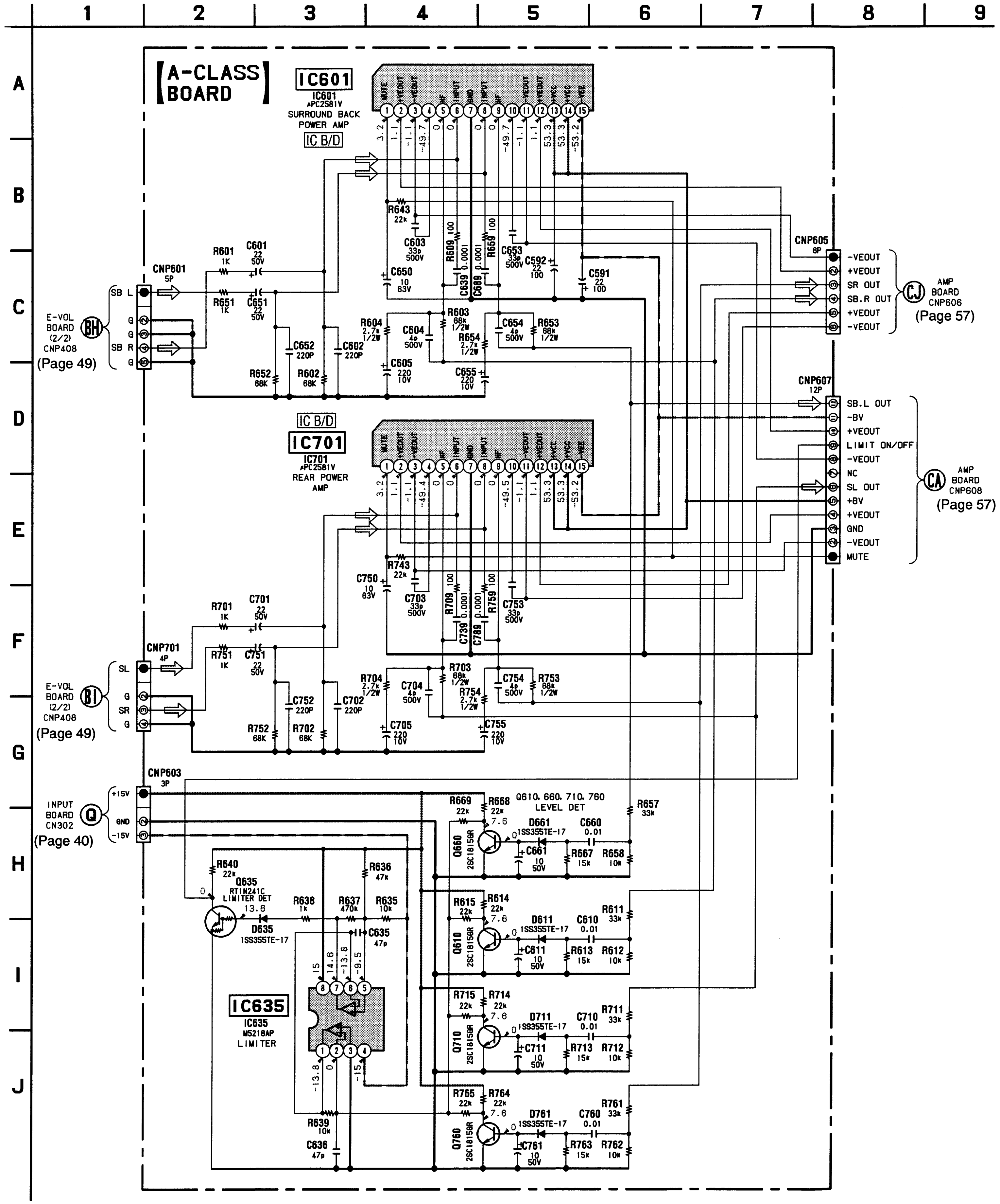
12
13
14
A
B
C
D
E
F
G
H
I
(Page 47)
E-VOL BOARD
CNP408
BH
(Page 39)
INPUT BOARD
CN302
Q
(Page 47)
E-VOL BOARD
CNP408
BI
【A-CLASS BOARD】
CNP601
EP602
JW619
JW618
CNP603
D635
R638
R636
R637
C638
R635
C635
IC635
JW529
JW522
R641
Q635
R639
C636
CNP701
EP601
JW617
JW616
R751
R752
C605
R601
R602
C601
C602
C662
R652
R651
C651
C655
C591
R604
R654
R669
R668
Q660
R615
R614
Q610
R763
R764
Q760
R715
R714
Q710
JW528
C706
R701
C701
R702
C702
C752
C751
C755
R754
R704
IC601
IC701
C592
D661
D611
D761
D711
JW521
C661
C611
C761
C711
R608
C604
C639
R609
C609
R653
C654
C653
R667
R666
R613
R612
R763
R762
R713
R712
R703
C704
C703
C739
R709
R759
R753
C754
C753
C603
R650
C650
C660
R657
C610
R611
C760
R761
LF701
C710
R711
JW509
JW504
C789
C750
JW502
JW500
R643
JW520
CNP607
JW519
JW518
JW517
JW526
JW515
JW514
JW513
JW512
JW511
JW510
JW508
JW507
JW506
JW501
JW505
R743
CNP605
1-685-475-
11
(11)
CA
AMP BOARD
CNP608
(Page 56)
CJ
AMP BOARD
CNP606
(Page 56)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D611	E-7	IC701	E-12
D635	B-8		
D661	E-6	Q610	E-7
D711	E-9	Q635	D-7
D761	E-8	Q660	E-6
		Q710	E-9
IC601	E-2	Q760	E-8
IC635	C-9		

6-27. SCHEMATIC DIAGRAM — A-CLASS SECTION — • Refer to page 70 for IC Block Diagrams.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A
B
C
D
E
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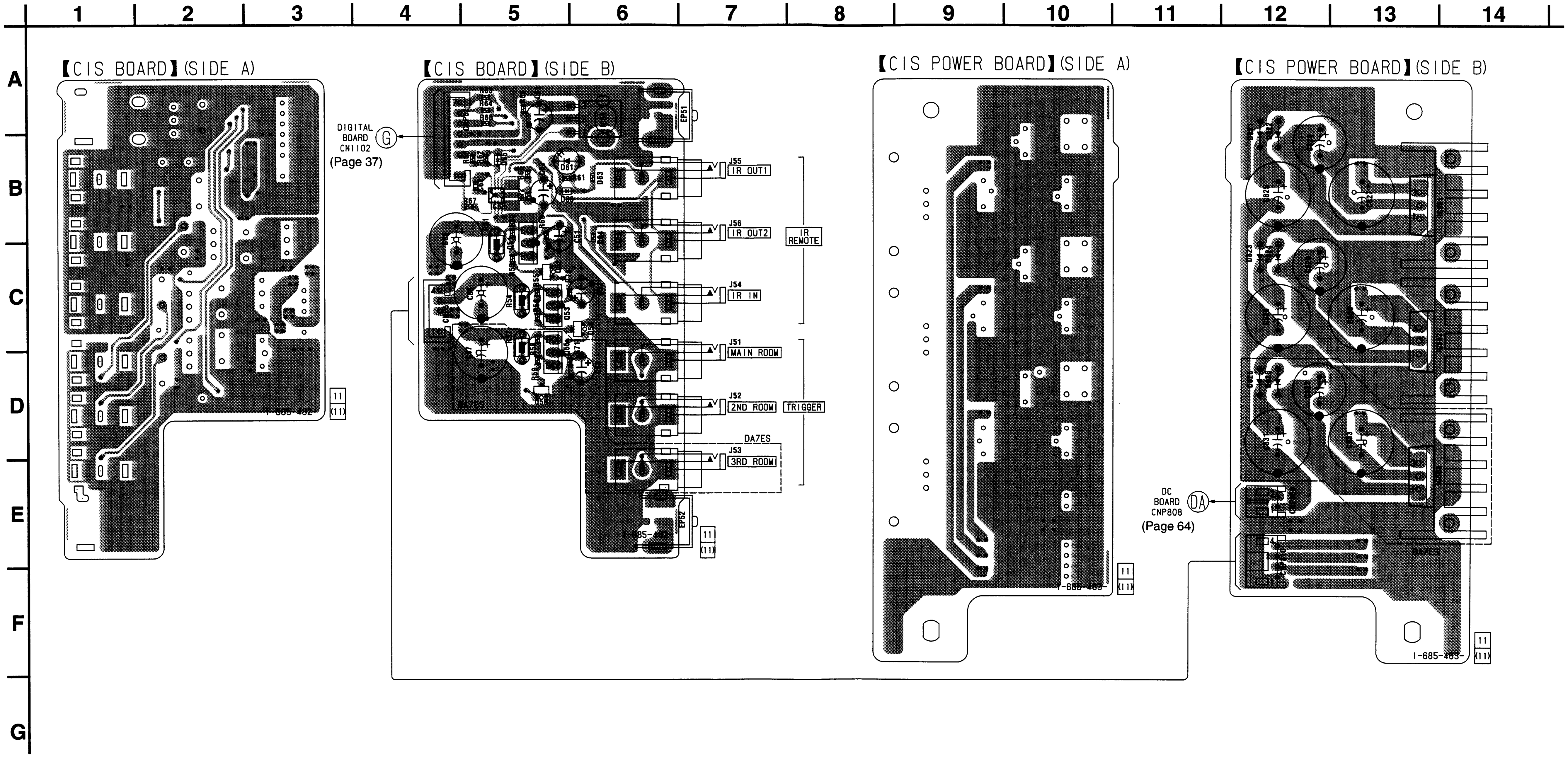
G
H
I
J
A-CLASS BOARD
IC601
IC601
μPC2581V
SURROUND BACK POWER AMP
IC B/D
MUTE
+VEOUT
-VEOUT
NF
INPUT
GND
+VCC
-VEE
IC701
IC701
μPC2581V
REAR POWER AMP
IC B/D
CNP601
5P
SB L
G
SB R
E-VOL BOARD (2/2) CNP408
BH
(Page 49)
CNP701
4P
SL
SR
E-VOL BOARD (2/2) CNP408
BI
(Page 49)
CNP603
3P
+15V
GND
-15V
INPUT BOARD CN302
Q
(Page 40)
CNP605
6P
-VEOUT
+VEOUT
SR OUT
SB.R OUT
+VEOUT
-VEOUT
CJ
AMP BOARD CNP606
(Page 57)
CNP607
12P
SB.L OUT
-BV
+VEOUT
LIMIT ON/OFF
-VEOUT
NC
SL OUT
+BV
+VEOUT
GND
-VEOUT
MUTE
CA
AMP BOARD CNP608
(Page 57)
R601 1K
C601 22 50V
R651 1K
C651 22 50V
C652 220P
C602 220P
R652 68K
R602 68K
R643 22k
C603 33p 500V
C650 10 63V
R609 100
C639 0.0001
C689 0.0001
R659 100
C653 33p 500V
C592 22 100
C591 22 100
R604 2.7k 1/2W
C604 4p 500V
R603 68k 1/2W
R654 2.7k 1/2W
C654 4p 500V
R653 68k 1/2W
C605 220 10V
C655 220 10V
R701 1K
C701 22 50V
R751 1K
C751 22 50V
C752 220P
C702 220P
R752 68K
R702 68K
R743 22k
C750 10 63V
C703 33p 500V
R709 100
C739 0.0001
C789 0.0001
R759 100
C753 33p 500V
R704 2.7k 1/2W
C704 4p 500V
R703 68k 1/2W
R754 2.7k 1/2W
C754 4p 500V
R753 68k 1/2W
C705 220 10V
C755 220 10V
3.2
1.1
-1.1
-49.7
-49.4
-49.5
0
53.3
-53.2
R640 22k
Q635 RT1N241C LIMITER DET
13.8
D635 1SS355TE-17
R638 1k
R637 470k
R635 10k
R636 47k
C635 47p
15
14.6
-13.8
-9.5
-15
IC635
IC635
M5218AP
LIMITER
R639 10k
C636 47p
Q610, 660, 710, 760 LEVEL DET
R669 22k
R668 22k
R657 33k
7.6
Q660 2SC1815GR
D661 1SS355TE-17
C660 0.01
C661 10 50V
R667 15k
R658 10k
R615 22k
R614 22k
Q610 2SC1815GR
D611 1SS355TE-17
C610 0.01
R611 33k
C611 10 50V
R613 15k
R612 10k
R715 22k
R714 22k
Q710 2SC1815GR
D711 1SS355TE-17
C710 0.01
R711 33k
C711 10 50V
R713 15k
R712 10k
R765 22k
R764 22k
Q760 2SC1815GR
D761 1SS355TE-17
C760 0.01
R761 33k
C761 10 50V
R763 15k
R762 10k

6-28. PRINTED WIRING BOARDS — CIS SECTION — • Refer to page 27 for Circuit Boards Location.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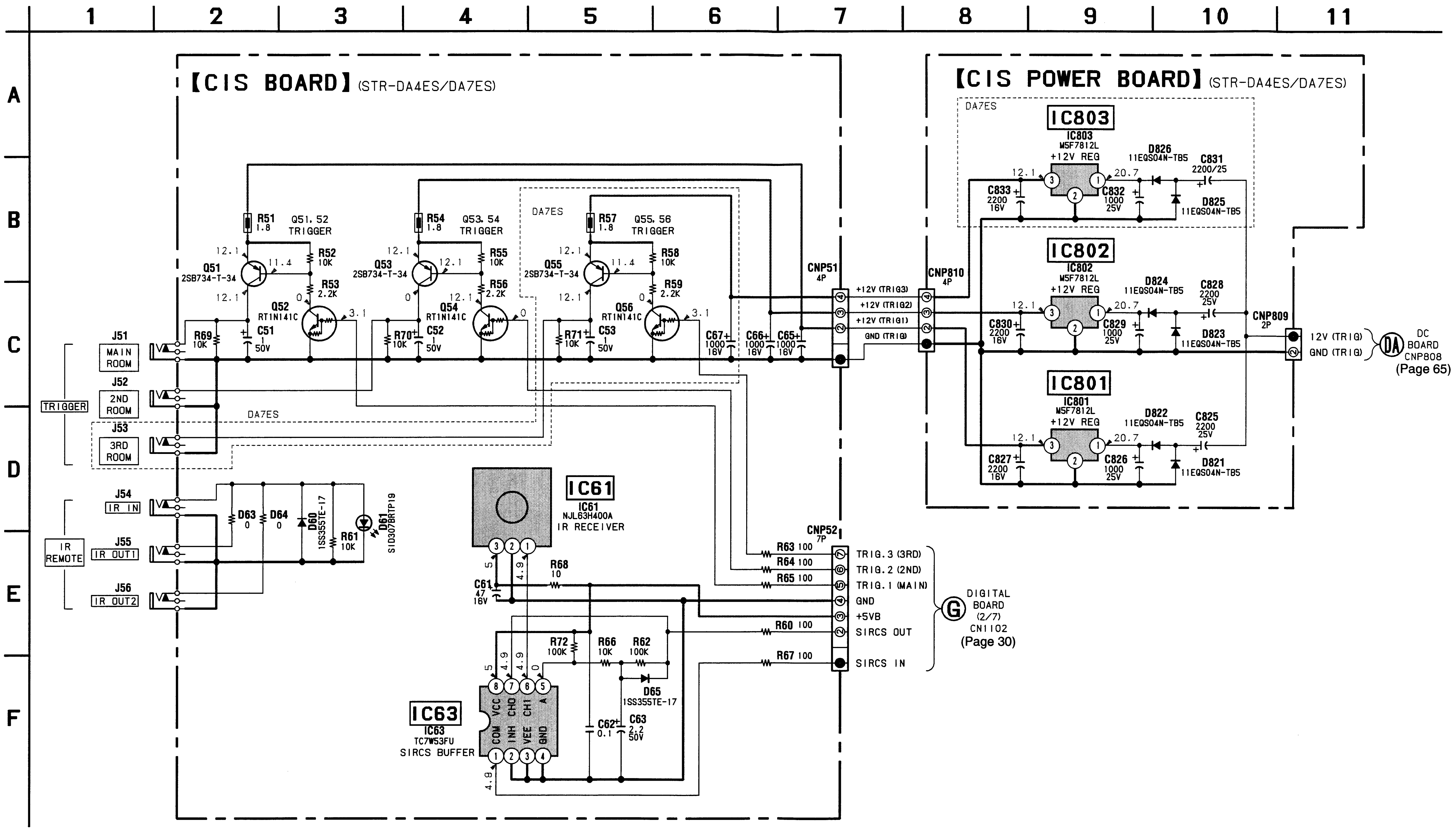
G
【CIS BOARD】(SIDE A)
【CIS BOARD】(SIDE B)
DIGITAL BOARD (G) CN1102
(Page 37)
EP51
J55 IR OUT1
J56 IR OUT2
IR REMOTE
J54 IR IN
J51 MAIN ROOM
J52 2ND ROOM
TRIGGER
DA7ES
J53 3RD ROOM
EP52
1-685-482-
11 (11)
【CIS POWER BOARD】(SIDE A)
1-685-483-
【CIS POWER BOARD】(SIDE B)
DC BOARD (DA) CNP808
(Page 64)
DA7ES
1-685-483-

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D60	B-5	IC63	B-5
D61	B-5	IC801	B-13
D65	B-5	IC802	C-13
D821	A-12	IC803	E-13
D822	A-12		
D823	C-12	Q51	C-5
D824	C-12	Q52	C-5
D825	D-12	Q53	C-5
D826	D-12	Q54	C-6
		Q55	D-5
IC61	A-6	Q56	D-5

6-29. SCHEMATIC DIAGRAM — CIS SECTION —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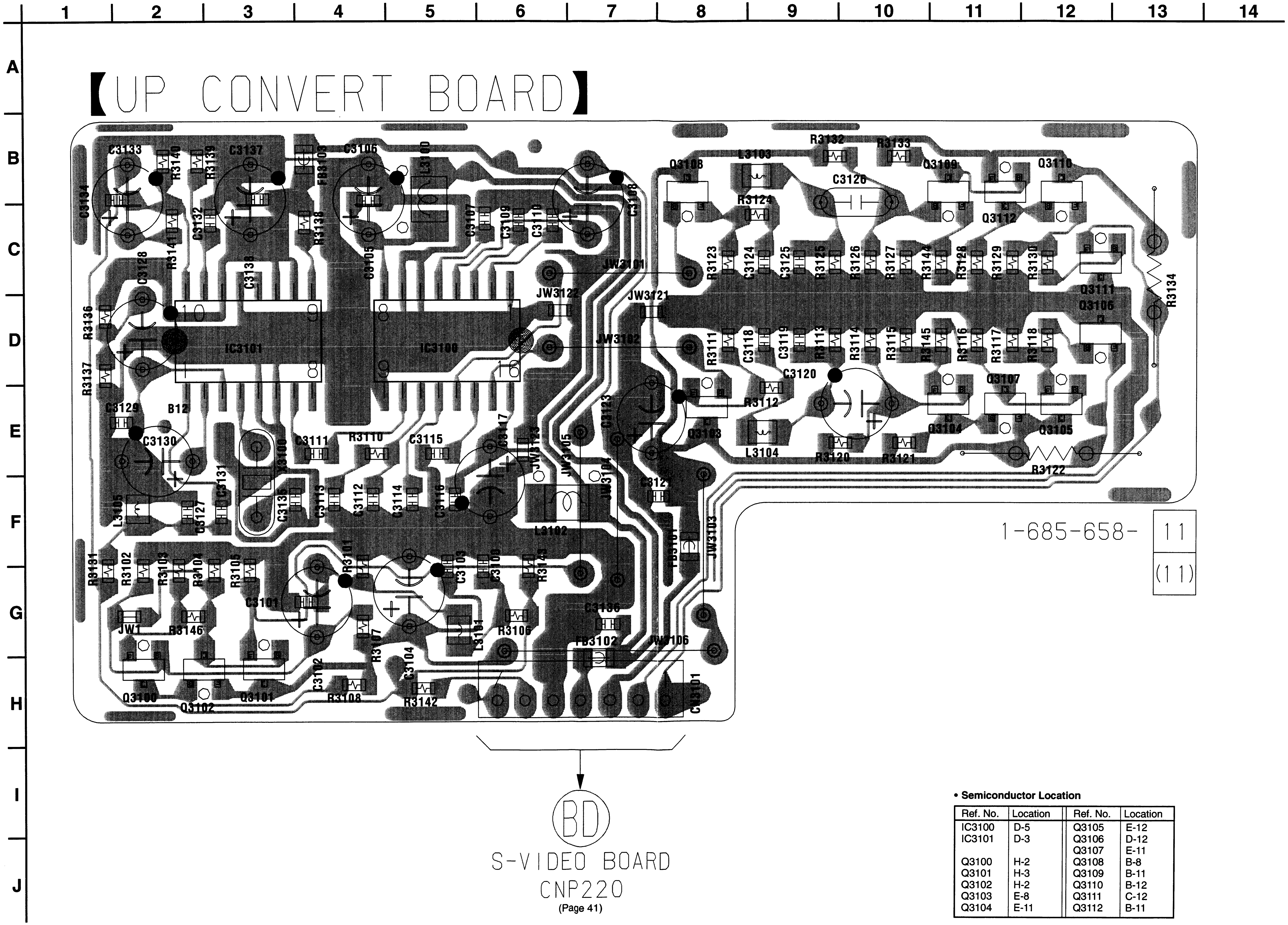
A
B
C
D
E
F
【CIS BOARD】(STR-DA4ES/DA7ES)
R51 1.8
Q51, 52 TRIGGER
Q51 2SB734-T-34
R52 10K
R53 2.2K
Q52 RT1N141C
R69 10K
C51 1 50V
R54 1.8
Q53, 54 TRIGGER
Q53 2SB734-T-34
R55 10K
R56 2.2K
Q54 RT1N141C
R70 10K
C52 1 50V
DA7ES
R57 1.8
Q55, 56 TRIGGER
Q55 2SB734-T-34
R58 10K
R59 2.2K
Q56 RT1N141C
R71 10K
C53 1 50V
12.1
11.4
0
3.1
C67 1000 16V
C66 1000 16V
C65 1000 16V
CNP51 4P
+12V (TRIG3)
+12V (TRIG2)
+12V (TRIG1)
GND (TRIG)
TRIGGER
J51 MAIN ROOM
J52 2ND ROOM
J53 3RD ROOM
IR REMOTE
J54 IR IN
J55 IR OUT1
J56 IR OUT2
D63 0
D64 0
D60 1SS355TE-17
R61 10K
D61 SID307BRTP19
IC61
IC61 NJL63H400A IR RECEIVER
C61 47 16V
R68 10
5
4.9
IC63
IC63 TC7W53FU SIRCS BUFFER
VCC
CH0
CH1
A
COM
INH
VEE
GND
R72 100K
R66 10K
R62 100K
D65 1SS355TE-17
C62 0.1
C63 2.2 50V
CNP52 7P
R63 100
R64 100
R65 100
R60 100
R67 100
TRIG.3 (3RD)
TRIG.2 (2ND)
TRIG.1 (MAIN)
GND
+5VB
SIRCS OUT
SIRCS IN
G
DIGITAL BOARD (2/7) CN1102
(Page 30)
【CIS POWER BOARD】(STR-DA4ES/DA7ES)
DA7ES
IC803
IC803 M5F7812L +12V REG
D826 11EQS04N-TB5
C831 2200/25
C833 2200 16V
C832 1000 25V
D825 11EQS04N-TB5
20.7
CNP810 4P
IC802
IC802 M5F7812L +12V REG
D824 11EQS04N-TB5
C828 2200 25V
C830 2200 16V
C829 1000 25V
D823 11EQS04N-TB5
CNP809 2P
12V (TRIG)
GND (TRIG)
DA
DC BOARD CNP808
(Page 65)
IC801
IC801 M5F7812L +12V REG
D822 11EQS04N-TB5
C825 2200 25V
C827 2200 16V
C826 1000 25V
D821 11EQS04N-TB5

6-30. PRINTED WIRING BOARD — UP CONVERT SECTION — • Refer to page 27 for Circuit Boards Location.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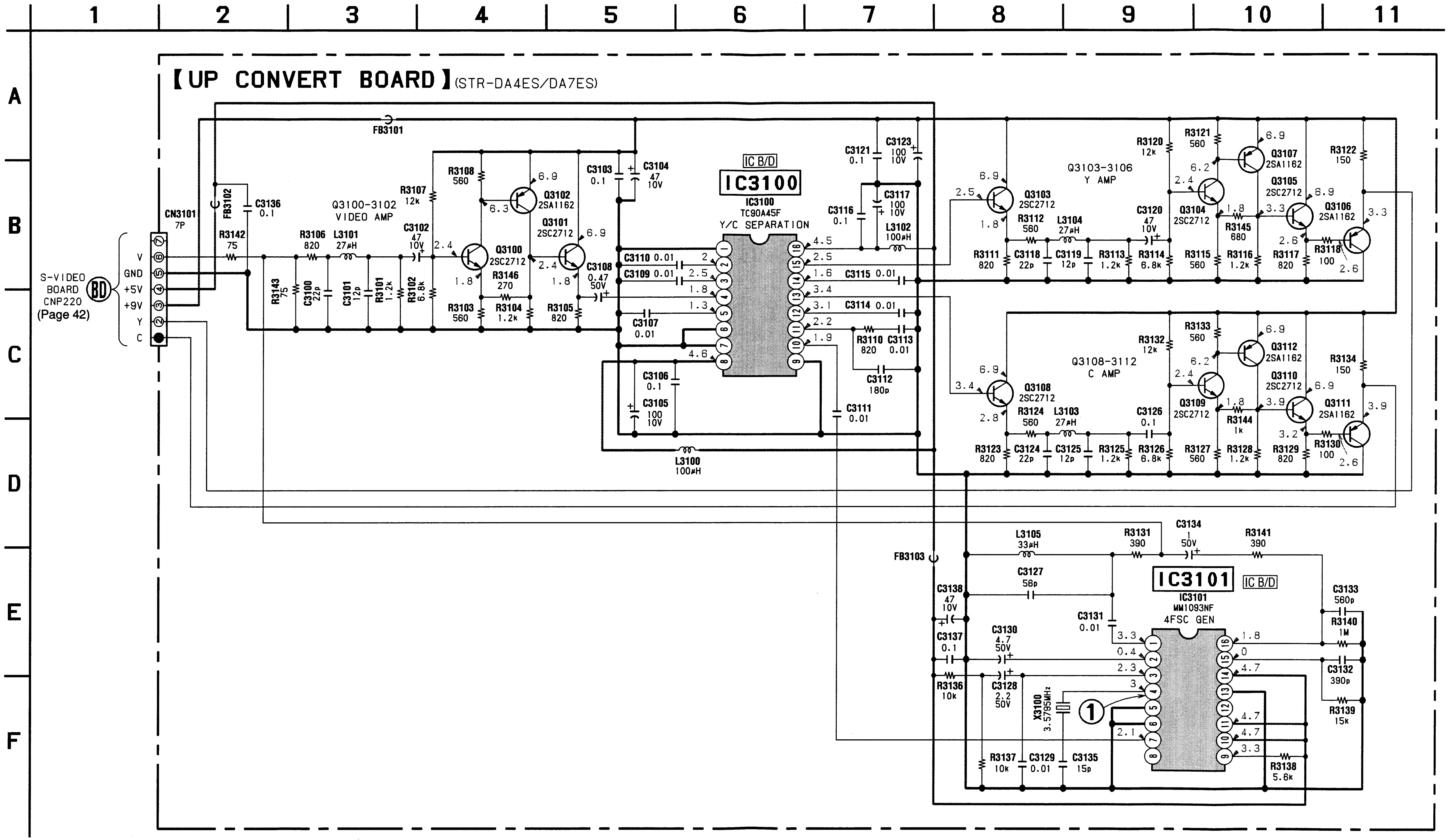
J
【UP CONVERT BOARD】
IC3101
IC3100
Q3100
Q3101
Q3102
Q3103
Q3104
Q3105
Q3106
Q3107
Q3108
Q3109
Q3110
Q3111
Q3112
L3100
L3101
L3102
L3103
L3104
L3105
X3100
FB3101
FB3102
FB3103
JW1
JW3101
JW3102
JW3103
JW3104
JW3105
JW3106
JW3121
JW3122
JW3123
B12
1-685-658- 11
(11)
BD
S-VIDEO BOARD
CNP220
(Page 41)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
IC3100	D-5	Q3105	E-12
IC3101	D-3	Q3106	D-12
		Q3107	E-11
Q3100	H-2	Q3108	B-8
Q3101	H-3	Q3109	B-11
Q3102	H-2	Q3110	B-12
Q3103	E-8	Q3111	C-12
Q3104	E-11	Q3112	B-11

6-31. SCHEMATIC DIAGRAM — UP CONVERT SECTION — **• Refer to page 28 for Waveform.**
• Refer to page 71 for IC Block Diagrams.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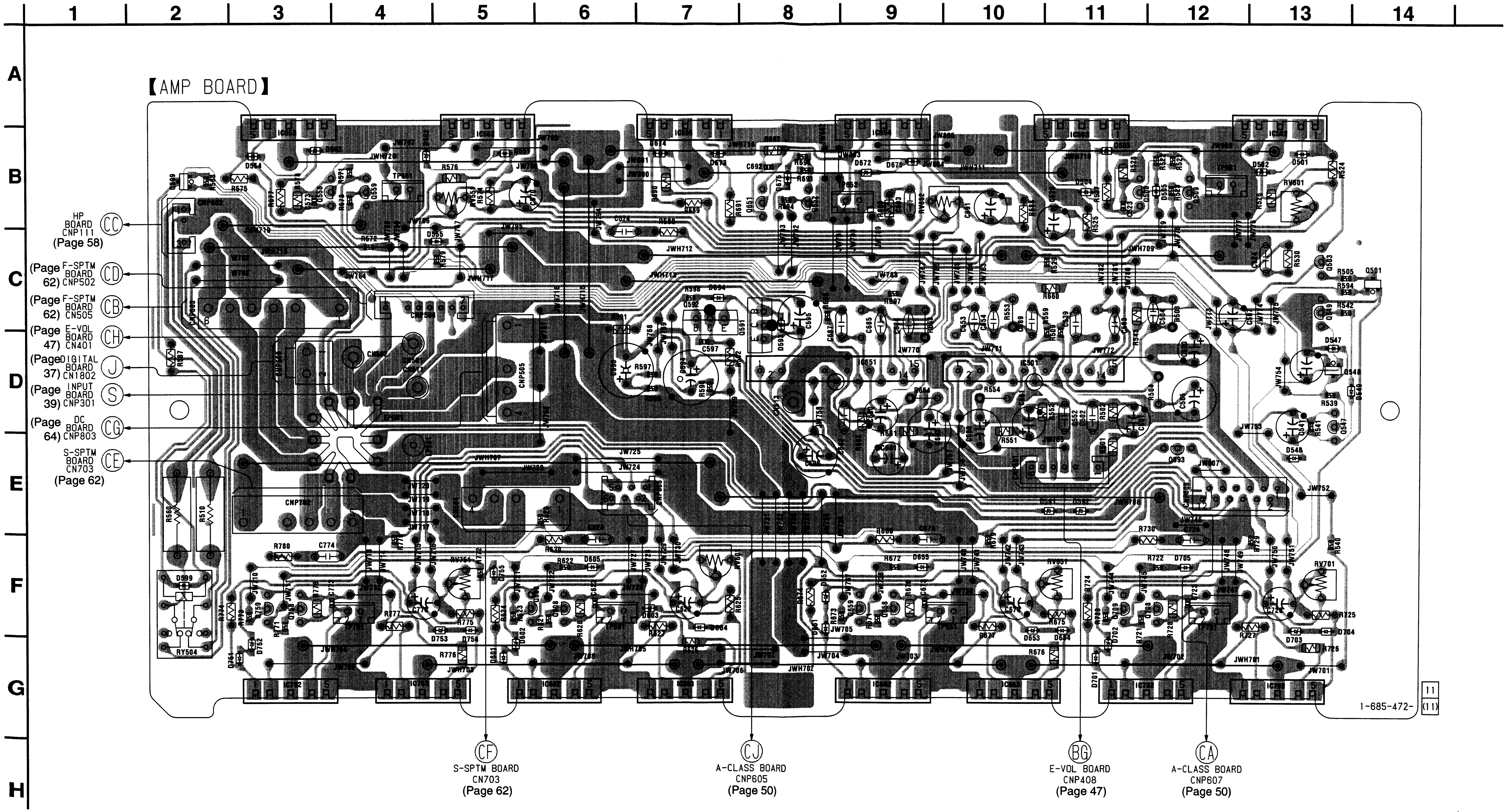
11
A
B
C
D
E
F
【UP CONVERT BOARD】(STR-DA4ES/DA7ES)
S-VIDEO BOARD BD CNP220 (Page 42)
CN3101 7P
V
GND
+5V
+9V
Y
C
FB3101
FB3102
C3136 0.1
R3142 75
R3143 75
C3100 22p
C3101 12p
R3101 1.2k
R3102 6.8k
R3106 820
L3101 27µH
Q3100-3102 VIDEO AMP
R3107 12k
C3102 47 10V
R3108 560
Q3102 2SA1162
Q3100 2SC2712
Q3101 2SC2712
R3146 270
R3103 560
R3104 1.2k
R3105 820
C3103 0.1
C3104 47 10V
C3108 0.47 50V
6.9
6.3
2.4
1.8
IC B/D
IC3100
IC3100 TC90A45F Y/C SEPARATION
C3110 0.01
C3109 0.01
C3107 0.01
C3106 0.1
C3105 100 10V
L3100 100µH
C3121 0.1
C3123 100 10V
C3117 100 10V
C3116 0.1
L3102 100µH
C3115 0.01
C3114 0.01
R3110 820
C3113 0.01
C3112 180p
C3111 0.01
4.5
2.5
1.6
3.4
3.1
2.2
1.9
1.8
1.3
4.6
Q3103-3106 Y AMP
Q3103 2SC2712
R3111 820
R3112 560
L3104 27µH
C3118 22p
C3119 12p
R3113 1.2k
R3114 6.8k
R3120 12k
R3121 560
C3120 47 10V
Q3104 2SC2712
Q3107 2SA1162
Q3105 2SC2712
Q3106 2SA1162
R3145 680
R3115 560
R3116 1.2k
R3117 820
R3118 100
R3122 150
6.2
3.3
2.6
Q3108-3112 C AMP
Q3108 2SC2712
R3123 820
R3124 560
L3103 27µH
C3124 22p
C3125 12p
R3125 1.2k
R3126 6.8k
R3132 12k
R3133 560
C3126 0.1
Q3109 2SC2712
Q3112 2SA1162
Q3110 2SC2712
Q3111 2SA1162
R3144 1k
R3127 560
R3128 1.2k
R3129 820
R3130 100
R3134 150
3.9
3.2
2.8
FB3103
L3105 33µH
R3131 390
C3134 1 50V
R3141 390
C3127 56p
C3138 47 10V
C3137 0.1
R3136 10k
C3130 4.7 50V
C3128 2.2 50V
C3131 0.01
IC3101
IC3101 MM1093NF 4FSC GEN
X3100 3.5795MHz
①
R3137 10k
C3129 0.01
C3135 15p
C3133 560p
R3140 1M
C3132 390p
R3139 15k
R3138 5.6k
0.4
2.3
3
2.1
0
4.7
3.3

6-32. PRINTED WIRING BOARD — AMP SECTION — • Refer to page 27 for Circuit Boards Location.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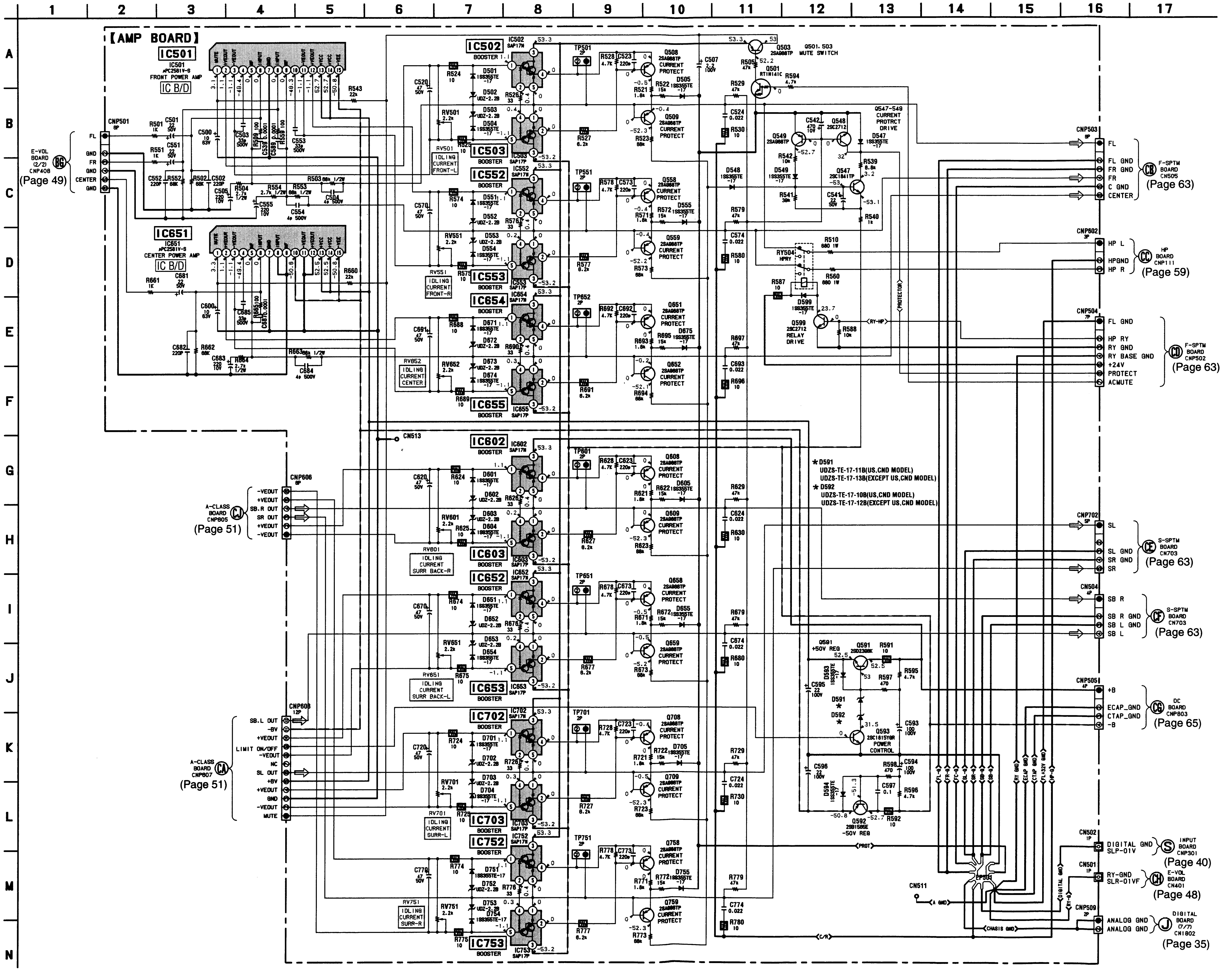
【AMP BOARD】
HP BOARD CNP111 (Page 58) CC
(Page 62) F-SPTM BOARD CNP502 CD
(Page 62) F-SPTM BOARD CN505 CB
(Page 47) E-VOL BOARD CN401 CH
(Page 37) DIGITAL BOARD CN1802 J
(Page 39) INPUT BOARD CNP301 S
(Page 64) DC BOARD CNP803 CG
S-SPTM BOARD CN703 (Page 62) CE
CF S-SPTM BOARD CN703 (Page 62)
CJ A-CLASS BOARD CNP605 (Page 50)
BG E-VOL BOARD CNP408 (Page 47)
CA A-CLASS BOARD CNP607 (Page 50)
1-685-472-11 (11)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D501	B-13	D555	C-5	D652	F-8	D704	F-13	IC553	B-3	Q501	C-14	Q599	B-2
D502	B-13	D591	E-11	D653	F-10	D705	F-12	IC602	G-6	Q503	C-13	Q608	F-6
D503	B-11	D592	E-11	D654	F-11	D751	G-3	IC603	G-7	Q508	B-11	Q609	F-5
D504	B-11	D593	D-8	D655	F-9	D752	G-3	IC651	D-9	Q509	B-12	Q651	B-8
D505	B-12	D594	C-7	D671	B-9	D753	F-5	IC652	G-9	Q547	D-13	Q652	B-8
D547	D-13	D599	F-2	D672	B-9	D754	F-5	IC653	G-10	Q548	D-13	Q658	F-9
D548	E-13	D601	G-5	D673	B-7	D755	F-5	IC654	B-9	Q549	C-13	Q659	F-9
D549	D-13	D602	G-5	D674	B-7			IC655	B-7	Q558	B-3	Q708	F-12
D551	B-5	D603	F-7	D675	B-8	IC501	D-10	IC702	G-11	Q559	B-4	Q709	F-11
D552	B-4	D604	F-7	D701	G-11	IC502	B-13	IC703	G-13	Q591	C-8	Q758	F-3
D553	B-3	D605	F-6	D702	G-11	IC503	B-11	IC752	G-3	Q592	C-7	Q759	F-3
D554	B-3	D651	F-8	D703	F-13	IC552	B-5	IC753	G-4	Q593	E-12		

6-33. SCHEMATIC DIAGRAM — AMP SECTION — • Refer to page 70 for IC Block Diagrams.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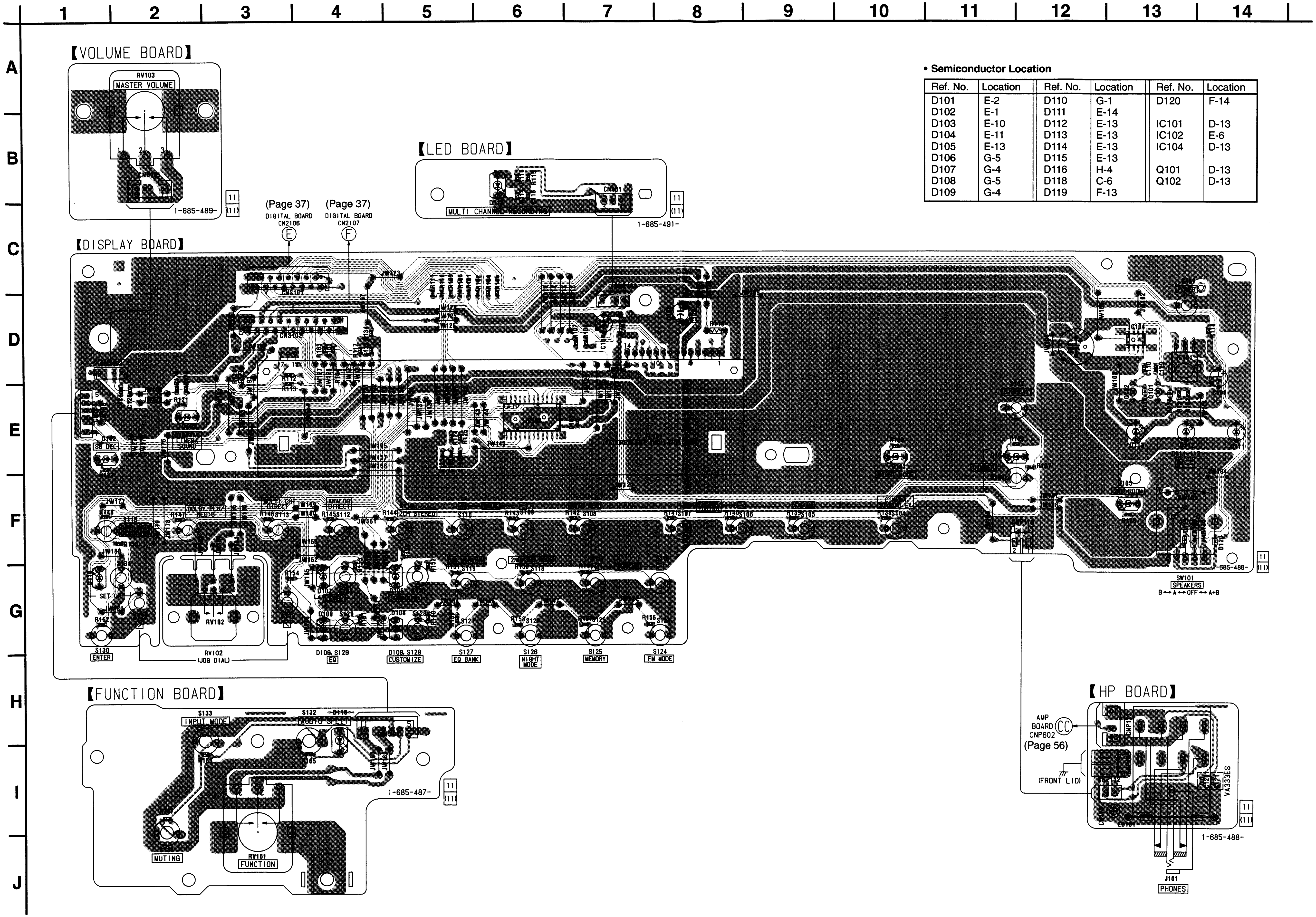
I
J
K
L
M
N
【AMP BOARD】
IC501
IC501 µPC2581V-S FRONT POWER AMP
IC B/D
IC651
IC651 µPC2581V-S CENTER POWER AMP
IC B/D
IC502
IC503
IC552
IC553
IC654
IC655
IC602
IC603
IC652
IC653
IC702
IC703
IC752
IC753
BOOSTER
SAP17N
SAP17P
CNP501 8P
E-VOL BOARD (2/2) CNP408
(Page 49)
FL
GND
FR
GND
CENTER
GND
RV501 IDLING CURRENT FRONT-L
RV551 IDLING CURRENT FRONT-R
RV652 IDLING CURRENT CENTER
RV601 IDLING CURRENT SURR BACK-R
RV651 IDLING CURRENT SURR BACK-L
RV701 IDLING CURRENT SURR-L
RV751 IDLING CURRENT SURR-R
CN513
CNP606 8P
-VEOUT
+VEOUT
SB.R OUT
SR OUT
+VEOUT
-VEOUT
A-CLASS BOARD CNP805
(Page 51)
CNP608 12P
SB.L OUT
-8V
+VEOUT
LIMIT ON/OFF
-VEOUT
NC
SL OUT
+8V
+VEOUT
GND
-VEOUT
MUTE
A-CLASS BOARD CNP807
(Page 51)
Q508 2SA988TP CURRENT PROTECT
Q509 2SA988TP CURRENT PROTECT
Q558 2SA988TP CURRENT PROTECT
Q559 2SA988TP CURRENT PROTECT
Q651 2SA988TP CURRENT PROTECT
Q652 2SA988TP CURRENT PROTECT
Q608 2SA988TP CURRENT PROTECT
Q609 2SA988TP CURRENT PROTECT
Q658 2SA988TP CURRENT PROTECT
Q659 2SA988TP CURRENT PROTECT
Q708 2SA988TP CURRENT PROTECT
Q709 2SA988TP CURRENT PROTECT
Q758 2SA988TP CURRENT PROTECT
Q759 2SA988TP CURRENT PROTECT
Q503 2SA988TP
Q501, 503 MUTE SWITCH
Q501 RT1N141C
Q547-549 CURRENT PROTECT DRIVE
Q549 2SA988TP
Q548 2SC2712
Q547 2SC1841TP
RY504 HPRY
Q599 2SC2712 RELAY DRIVE
PROTECTOR
RY-HP
*D591 UDZS-TE-17-11B(US,CND MODEL) UDZS-TE-17-13B(EXCEPT US,CND MODEL)
*D592 UDZS-TE-17-10B(US,CND MODEL) UDZS-TE-17-12B(EXCEPT US,CND MODEL)
Q591 +50V REG
Q591 2SD2396K
Q593 2SC1815YGR POWER CONTROL
Q592 2SB1566E -50V REG
CNP503 8P
FL
FL GND
FR GND
FR
C GND
CENTER
F-SPTM BOARD CN505
(Page 63)
CNP502 3P
HP L
HPGND
HP R
HP BOARD CNP111
(Page 59)
CNP504 7P
FL GND
HP RY
RY GND
RY BASE GND
+24V
PROTECT
ACMUTE
F-SPTM BOARD CNP502
(Page 63)
CNP702 5P
SL
SL GND
SR GND
SR
S-SPTM BOARD CN703
(Page 63)
CN504 4P
SB R
SB R GND
SB L GND
SB L
S-SPTM BOARD CN703
(Page 63)
CNP505 4P
+B
ECAP_GND
CTAP_GND
-B
DC BOARD CNP803
(Page 65)
CN502 1P
DIGITAL GND SLP-01V
INPUT BOARD CNP301
(Page 40)
CN501 1P
RY-GND SLR-01VF
E-VOL BOARD CN401
(Page 48)
CNP509 2P
ANALOG GND
ANALOG GND
DIGITAL BOARD (7/7) CN1802
(Page 35)
CN511
A GND
CHASSIS GND
C/R
PROT

6-34. PRINTED WIRING BOARDS — DISPLAY SECTION — • Refer to page 27 for Circuit Boards Location.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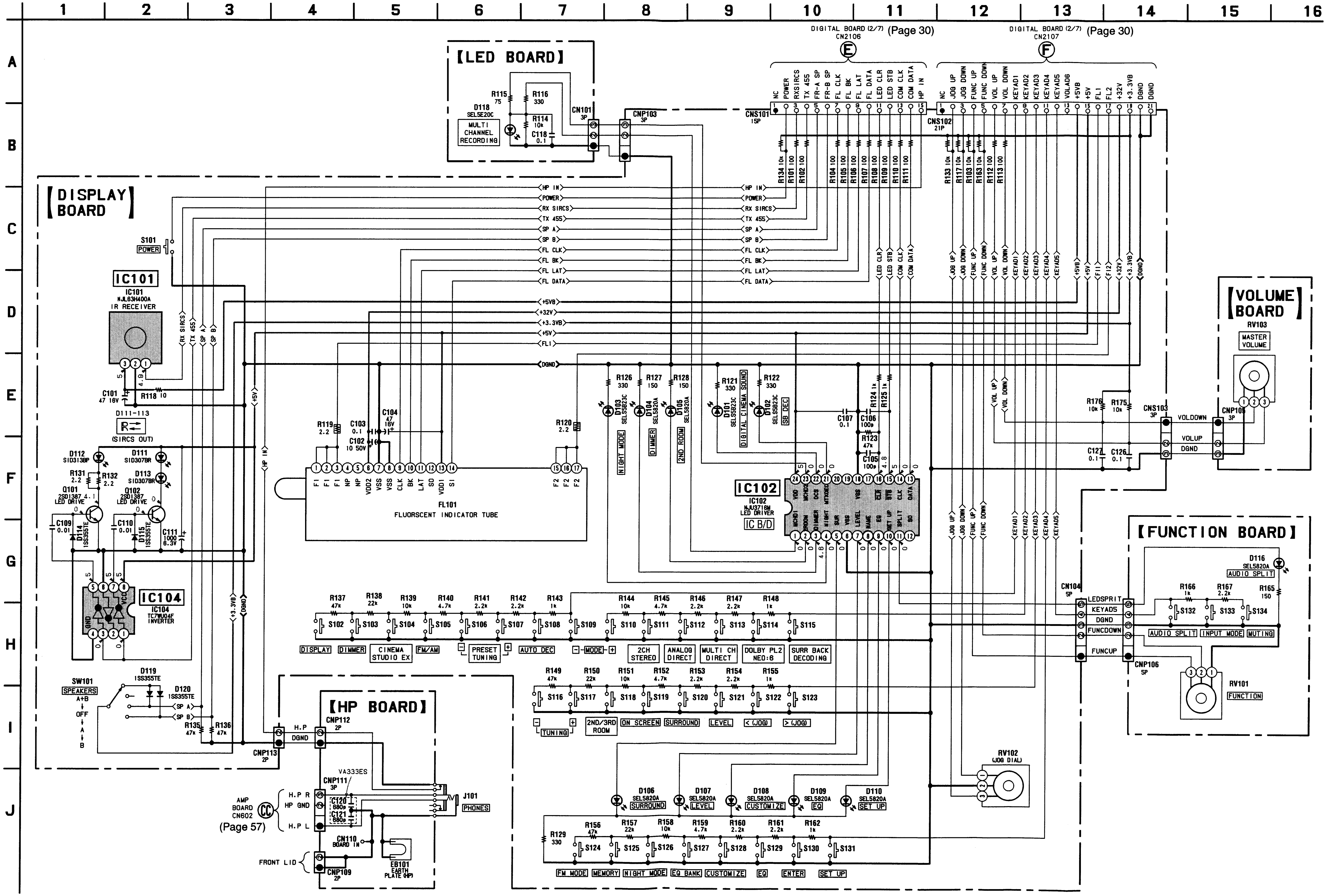
I
J
【VOLUME BOARD】
RV103
MASTER VOLUME
1-685-489-
11 (11)
【LED BOARD】
MULTI CHANNEL RECORDING
CN401
1-685-491-
11 (11)
(Page 37) DIGITAL BOARD CN2106 Ⓔ
(Page 37) DIGITAL BOARD CN2107 Ⓕ
【DISPLAY BOARD】
S130 ENTER
RV102 (JOG DIAL)
D109, S129 EQ
D108, S128 CUSTOMIZE
S127 EQ BANK
S126 NIGHT MODE
S125 MEMORY
S124 FM MODE
SW101 SPEAKERS
B↔A↔OFF↔A+B
1-685-486-
11 (11)
【FUNCTION BOARD】
S133 INPUT MODE
S132 AUDIO SELECT
1-685-487-
11 (11)
MUTING
RV101 FUNCTION
【HP BOARD】
AMP BOARD (CC) CNP602
(Page 56)
(FRONT LID)
VA333ES
1-685-488-
11 (11)
J101
PHONES

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	E-2	D110	G-1	D120	F-14
D102	E-1	D111	E-14		
D103	E-10	D112	E-13	IC101	D-13
D104	E-11	D113	E-13	IC102	E-6
D105	E-13	D114	E-13	IC104	D-13
D106	G-5	D115	E-13		
D107	G-4	D116	H-4	Q101	D-13
D108	G-5	D118	C-6	Q102	D-13
D109	G-4	D119	F-13		

6-35. SCHEMATIC DIAGRAM — DISPLAY SECTION — • Refer to page 66 for IC Block Diagram.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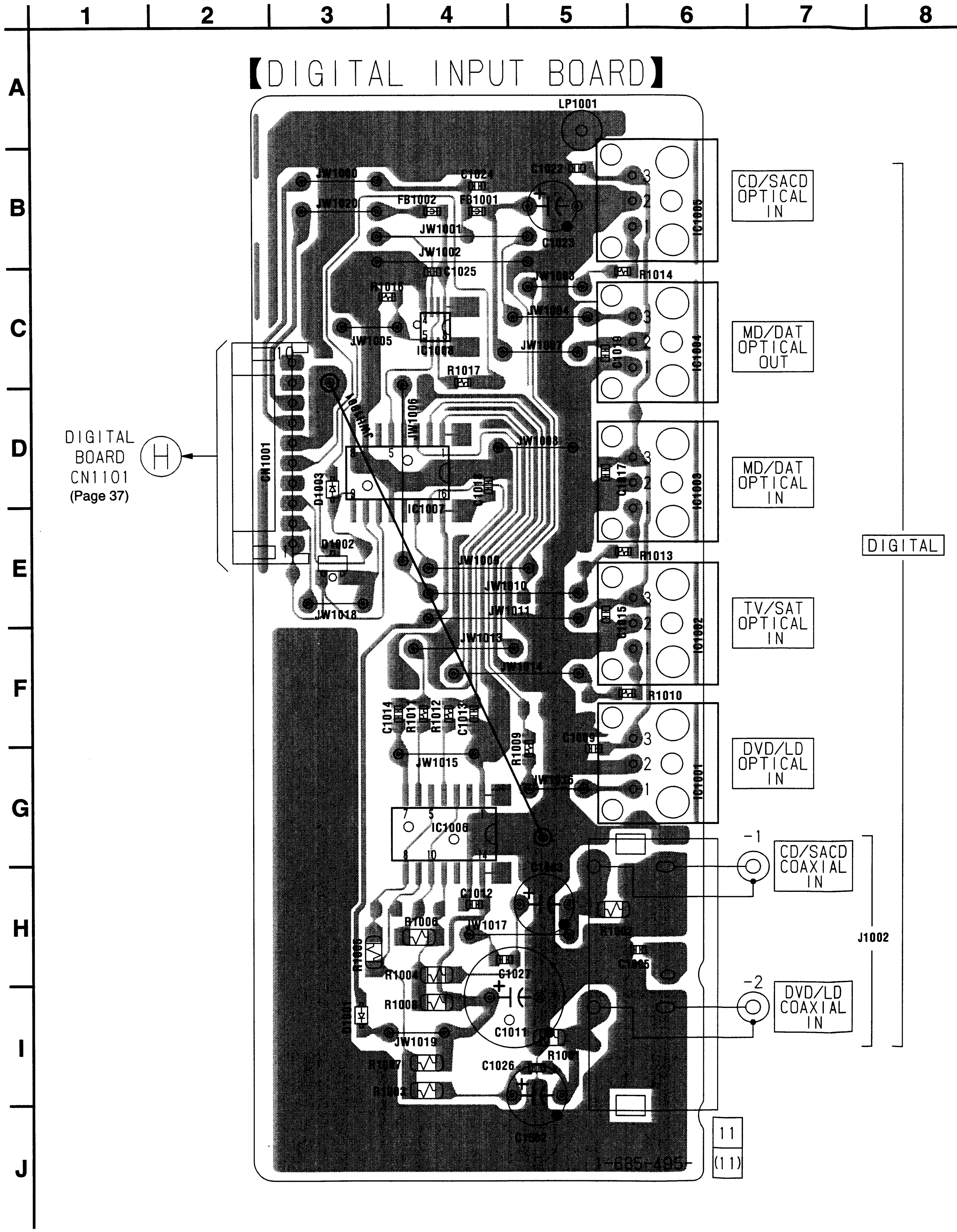
G
H
I
J
DIGITAL BOARD (2/7) (Page 30)
CN2106
E
DIGITAL BOARD (2/7) (Page 30)
CN2107
F
NC
POWER
RXSIRCS
TX 455
FR-A SP
FR-B SP
FL CLK
FL BK
FL LAT
FL DATA
LED CLR
LED STB
COM CLK
COM DATA
HP IN
JOG UP
JOG DOWN
FUNC UP
FUNC DOWN
VOL UP
VOL DOWN
KEYAD1
KEYAD2
KEYAD3
KEYAD4
KEYAD5
VOLAD6
+5VB
+5V
FL1
FL2
+32V
+3.3VB
DGND
CNS101
15P
CNS102
21P
[LED BOARD]
R115 75
R116 330
D118 SEL5E20C
MULTI CHANNEL RECORDING
R114 10k
C118 0.1
CN101 3P
CNP103 3P
[DISPLAY BOARD]
S101
POWER
IC101
IC101 NJL63H400A IR RECEIVER
C101 47 16V
R118 10
D111-113
(SIRCS OUT)
D112 SID313BP
D111 SID307BR
R131 2.2
R132 2.2
D113 SID307BR
Q101 2SD1387 LED DRIVE
Q102 2SD1387 LED DRIVE
C109 0.01
C110 0.01
D114 1SS355TE
D115 1SS355TE
C111 1000 6.3V
IC104
IC104 TC7WU04F INVERTER
R119 2.2
C103 0.1
C102 10 50V
C104 47 16V
R120 2.2
FL101
FLUORSCENT INDICATOR TUBE
R126 330
R127 150
R128 150
D103 SEL5823C
D104 SEL5820A
D105 SEL5820A
NIGHT MODE
DIMMER
2ND ROOM
R121 330
R122 330
D101 SEL5823C
D102 SEL5823C
DIGITAL CINEMA SOUND
SB DEC
C107 0.1
C106 100p
R124 1k
R125 1k
R123 47k
C105 100p
IC102
IC102 MJU3716M LED DRIVER
IC B/D
R176 10k
R175 10k
CNS103 3P
CNP108 3P
VOLDOWN
VOLUP
DGND
C127 0.1
C126 0.1
[VOLUME BOARD]
RV103
MASTER VOLUME
R137 47k
R138 22k
R139 10k
R140 4.7k
R141 2.2k
R142 2.2k
R143 1k
S102
S103
S104
S105
S106
S107
S108
S109
DISPLAY
DIMMER
CINEMA STUDIO EX
FM/AM
PRESET TUNING
AUTO DEC
MODE
R144 10k
R145 4.7k
R146 2.2k
R147 2.2k
R148 1k
S110
S111
S112
S113
S114
S115
2CH STEREO
ANALOG DIRECT
MULTI CH DIRECT
DOLBY PL2 NEO:6
SURR BACK DECODING
R149 47k
R150 22k
R151 10k
R152 4.7k
R153 2.2k
R154 2.2k
R155 1k
S116
S117
S118
S119
S120
S121
S122
S123
TUNING
2ND/3RD ROOM
ON SCREEN
SURROUND
LEVEL
< (JOG)
> (JOG)
[FUNCTION BOARD]
CN104 5P
LEDSPRIT
KEYAD5
DGND
FUNCDOWN
FUNCUP
CNP106 5P
D116 SEL5820A
AUDIO SPLIT
R166 1k
R167 2.2k
R165 150
S132
S133
S134
AUDIO SPLIT
INPUT MODE
MUTING
RV101
FUNCTION
RV102 (JOG DIAL)
D119 1SS355TE
D120 1SS355TE
SW101
SPEAKERS
A+B
OFF
A
B
R135 47k
R136 47k
CNP113 2P
H.P
DGND
[HP BOARD]
CNP112 2P
VA333ES
CNP111 3P
AMP BOARD CN602
CC
(Page 57)
H.P R
HP GND
H.P L
C120 880p
C121 880p
J101
PHONES
CN110 BOARD IN
EB101 EARTH PLATE (HP)
FRONT LID
CNP109 2P
D106 SEL5820A
SURROUND
D107 SEL5820A
LEVEL
D108 SEL5820A
CUSTOMIZE
D109 SEL5820A
EQ
D110 SEL5820A
SET UP
R129 330
R156 47k
R157 22k
R158 10k
R159 4.7k
R160 2.2k
R161 2.2k
R162 1k
S124
S125
S126
S127
S128
S129
S130
S131
FM MODE
MEMORY
NIGHT MODE
EQ BANK
CUSTOMIZE
EQ
ENTER
SET UP

6-36. PRINTED WIRING BOARD — DIGITAL INPUT SECTION — • Refer to page 27 for Circuit Boards Location.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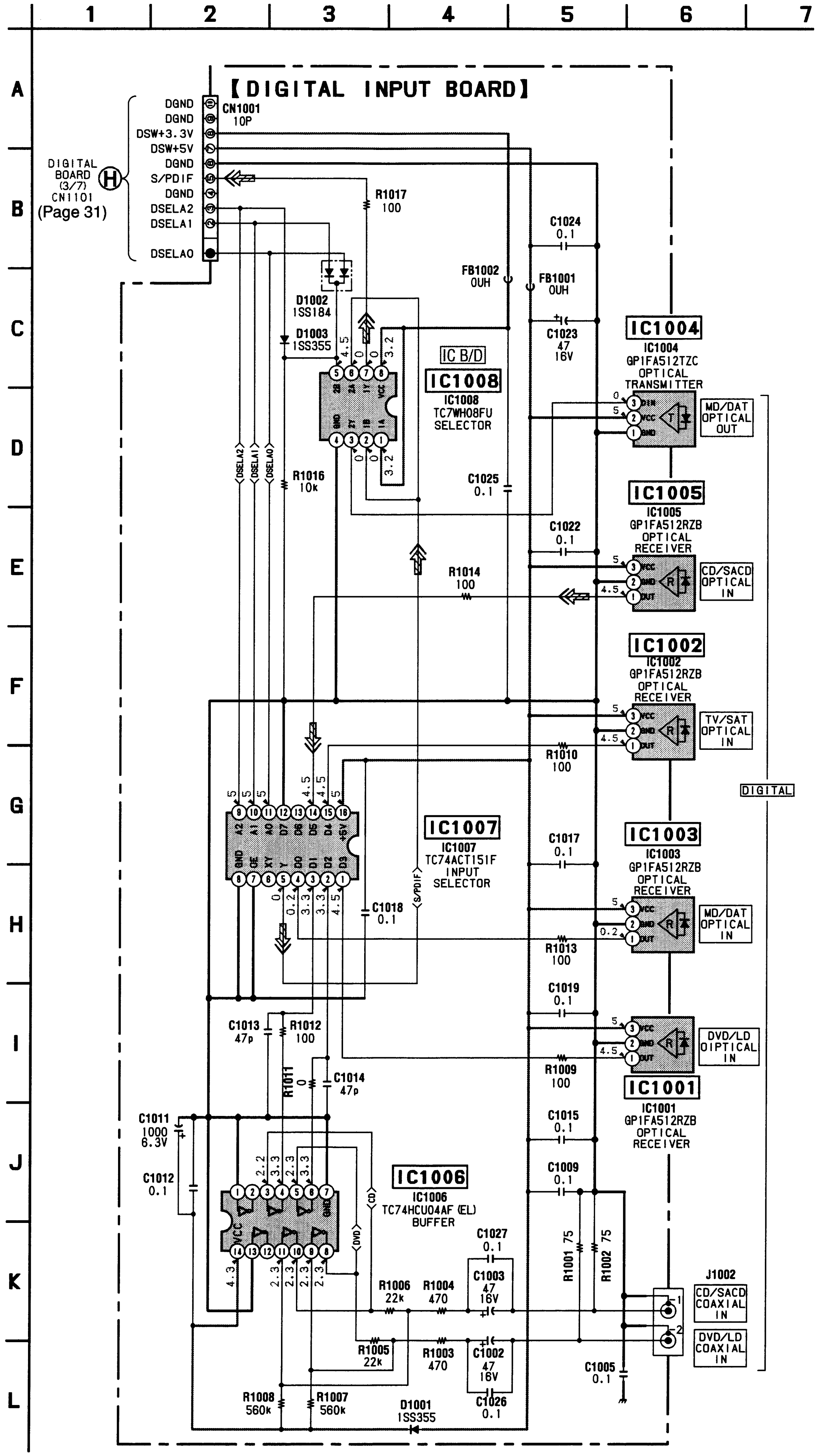
【DIGITAL INPUT BOARD】
LP1001
DIGITAL BOARD CN1101 (Page 37)
H
CN1001
CD/SACD OPTICAL IN
MD/DAT OPTICAL OUT
MD/DAT OPTICAL IN
TV/SAT OPTICAL IN
DVD/LD OPTICAL IN
DIGITAL
-1
CD/SACD COAXIAL IN
-2
DVD/LD COAXIAL IN
J1002
IC1001
IC1002
IC1003
IC1004
IC1005
IC1006
IC1007
IC1008
D1001
D1002
D1003
R1013
R1014
R1010
R1017
FB1001
FB1002
C1024
C1022
C1023
C1025
C1026
C1027
C1011
JW1001
JW1002
JW1005
JW1006
JW1008
JW1009
JW1010
JW1011
JW1013
JW1014
JW1015
JW1017
JW1018
JW1019
JW1020
11
(11)
1-685-495-

• **Semiconductor Location**

Ref. No.	Location
D1001	I-3
D1002	E-3
D1003	D-3
IC1001	G-6
IC1002	F-6
IC1003	D-6
IC1004	C-6
IC1005	B-6
IC1006	G-4
IC1007	D-4
IC1008	C-4

6-37. SCHEMATIC DIAGRAM — DIGITAL INPUT SECTION — • Refer to page 71 for IC Block Diagram.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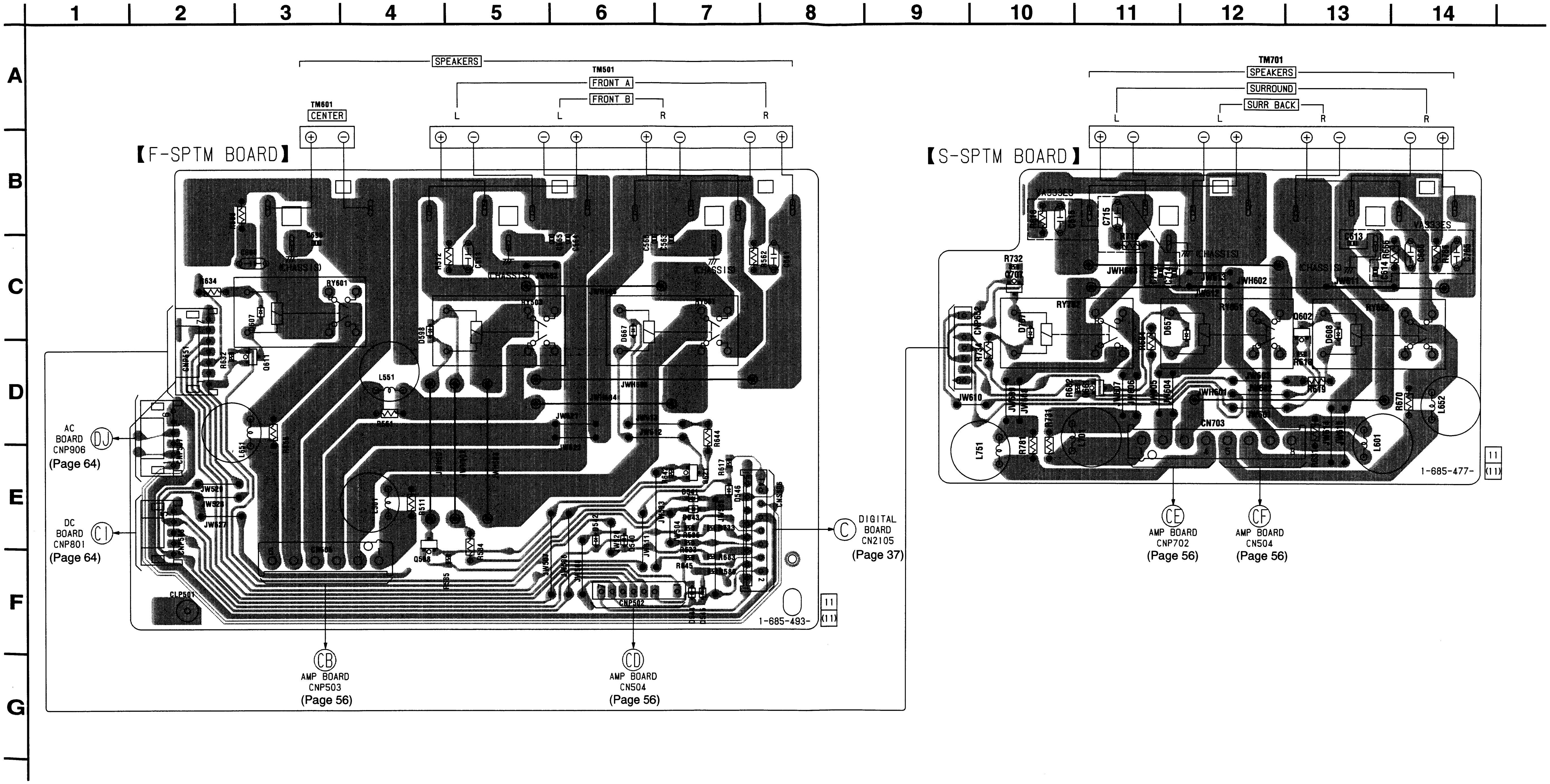
K
L
【DIGITAL INPUT BOARD】
DIGITAL BOARD (3/7) CN1101 (Page 31)
CN1001 10P
DGND
DGND
DSW+3.3V
DSW+5V
DGND
S/PDIF
DGND
DSELA2
DSELA1
DSELA0
R1017 100
C1024 0.1
FB1002 0UH
FB1001 0UH
D1002 1SS184
D1003 1SS355
C1023 47 16V
IC B/D
IC1008
IC1008 TC7WH08FU SELECTOR
IC1004
IC1004 GP1FA512TZC OPTICAL TRANSMITTER
MD/DAT OPTICAL OUT
R1016 10k
C1025 0.1
IC1005
IC1005 GP1FA512RZB OPTICAL RECEIVER
C1022 0.1
CD/SACD OPTICAL IN
R1014 100
IC1002
IC1002 GP1FA512RZB OPTICAL RECEIVER
TV/SAT OPTICAL IN
R1010 100
DIGITAL
IC1007
IC1007 TC74ACT151F INPUT SELECTOR
C1017 0.1
IC1003
IC1003 GP1FA512RZB OPTICAL RECEIVER
MD/DAT OPTICAL IN
C1018 0.1
R1013 100
C1019 0.1
C1013 47p
R1012 100
DVD/LD OIPTICAL IN
R1011 0
C1014 47p
R1009 100
IC1001
IC1001 GP1FA512RZB OPTICAL RECEIVER
C1011 1000 6.3V
C1015 0.1
C1012 0.1
IC1006
IC1006 TC74HCU04AF (EL) BUFFER
C1009 0.1
R1001 75
R1002 75
C1027 0.1
C1003 47 16V
J1002
R1006 22k
R1004 470
CD/SACD COAXIAL IN
DVD/LD COAXIAL IN
R1005 22k
R1003 470
C1002 47 16V
C1005 0.1
R1008 560k
R1007 560k
D1001 1SS355
C1026 0.1
(S/PDIF)
(CD)
(DVD)
(DSELA2)
(DSELA1)
(DSELA0)

6-38. PRINTED WIRING BOARDS — SPEAKER SECTION — • Refer to page 27 for Circuit Boards Location.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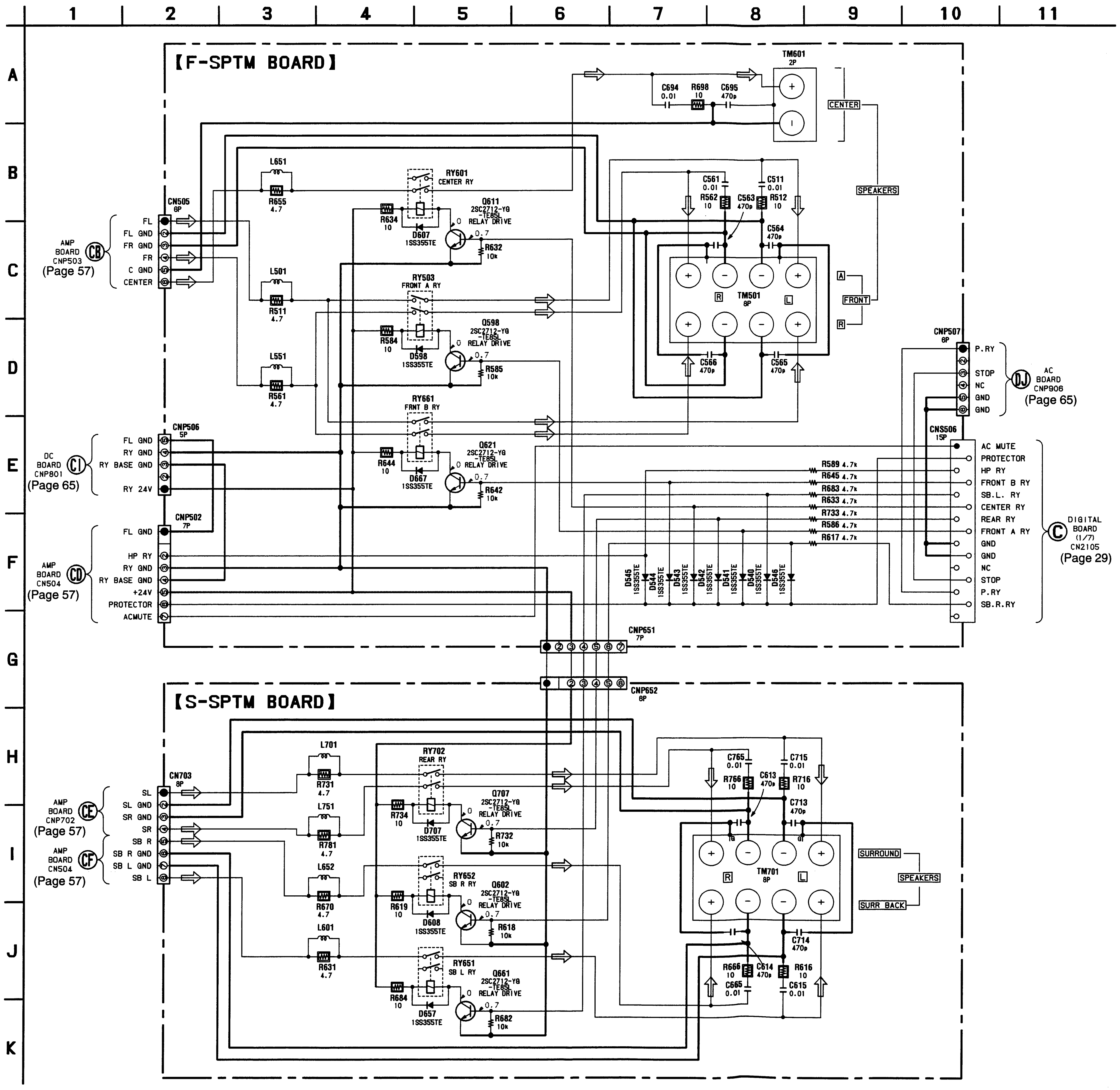
SPEAKERS
TM501
FRONT A
FRONT B
TM601
CENTER
L
R
【F-SPTM BOARD】
TM701
SPEAKERS
SURROUND
SURR BACK
【S-SPTM BOARD】
AC BOARD CNP906 (Page 64)
DJ
DC BOARD CNP801 (Page 64)
CI
DIGITAL BOARD CN2105 (Page 37)
C
CB
AMP BOARD CNP503 (Page 56)
CD
AMP BOARD CN504 (Page 56)
CE
AMP BOARD CNP702 (Page 56)
CF
AMP BOARD CN504 (Page 56)
1-685-493-
1-685-477-
11
(11)
RY601
L551
CLP501
CNP502
VA333ES
CHASSIS
L751
L601
L652
CN703
Q602
D608
D657
D598
D667
Q598
Q611
D607
D707

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D540	E-6	D657	D-12
D541	E-7	D667	C-6
D542	E-6	D707	C-10
D543	E-7		
D544	F-7	Q598	E-4
D545	F-7	Q602	D-13
D546	E-7	Q611	D-3
D598	C-4	Q621	E-7
D607	C-3	Q661	D-11
D608	D-13	Q707	C-10

6-39. SCHEMATIC DIAGRAM — SPEAKER SECTION —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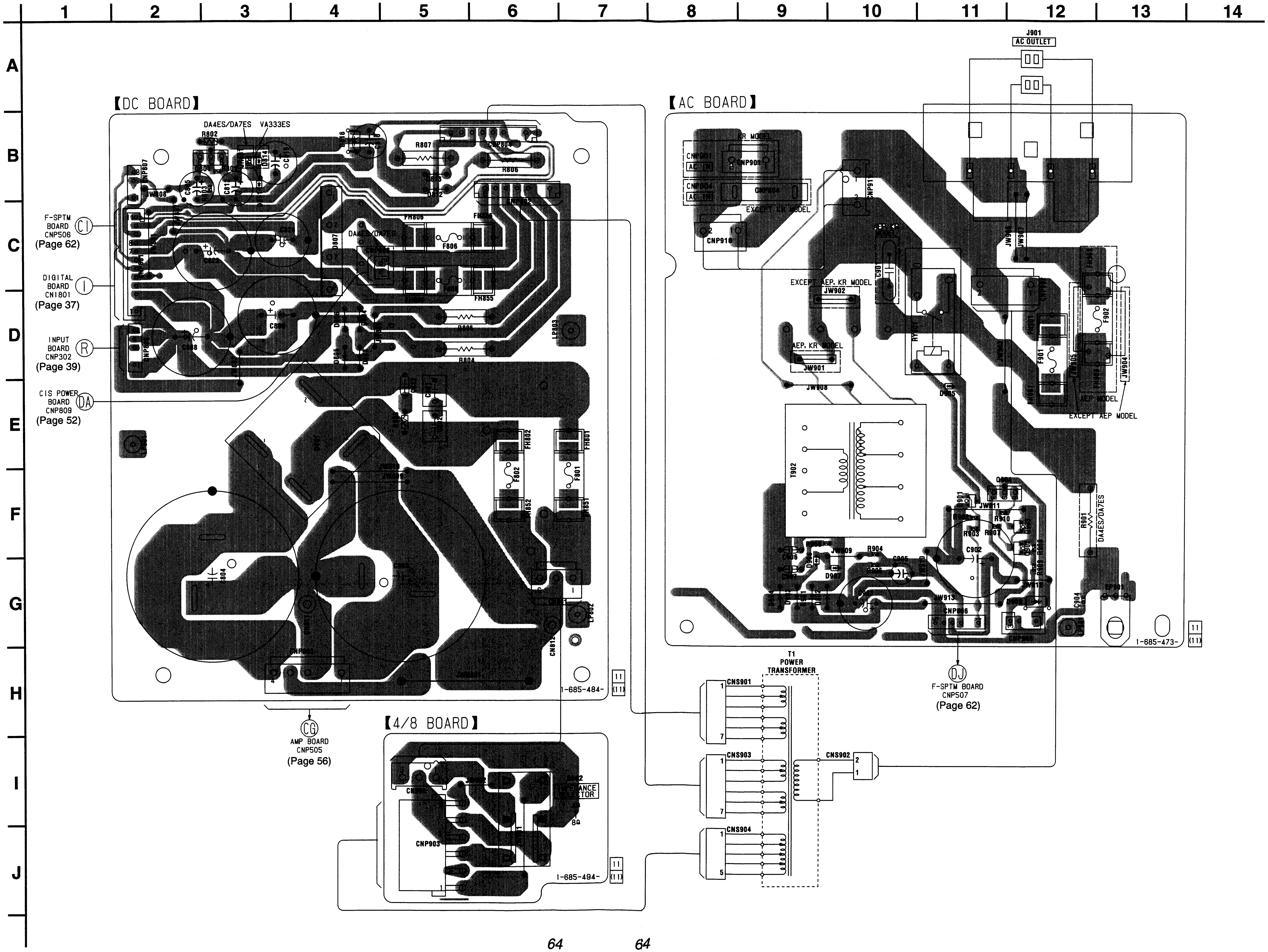
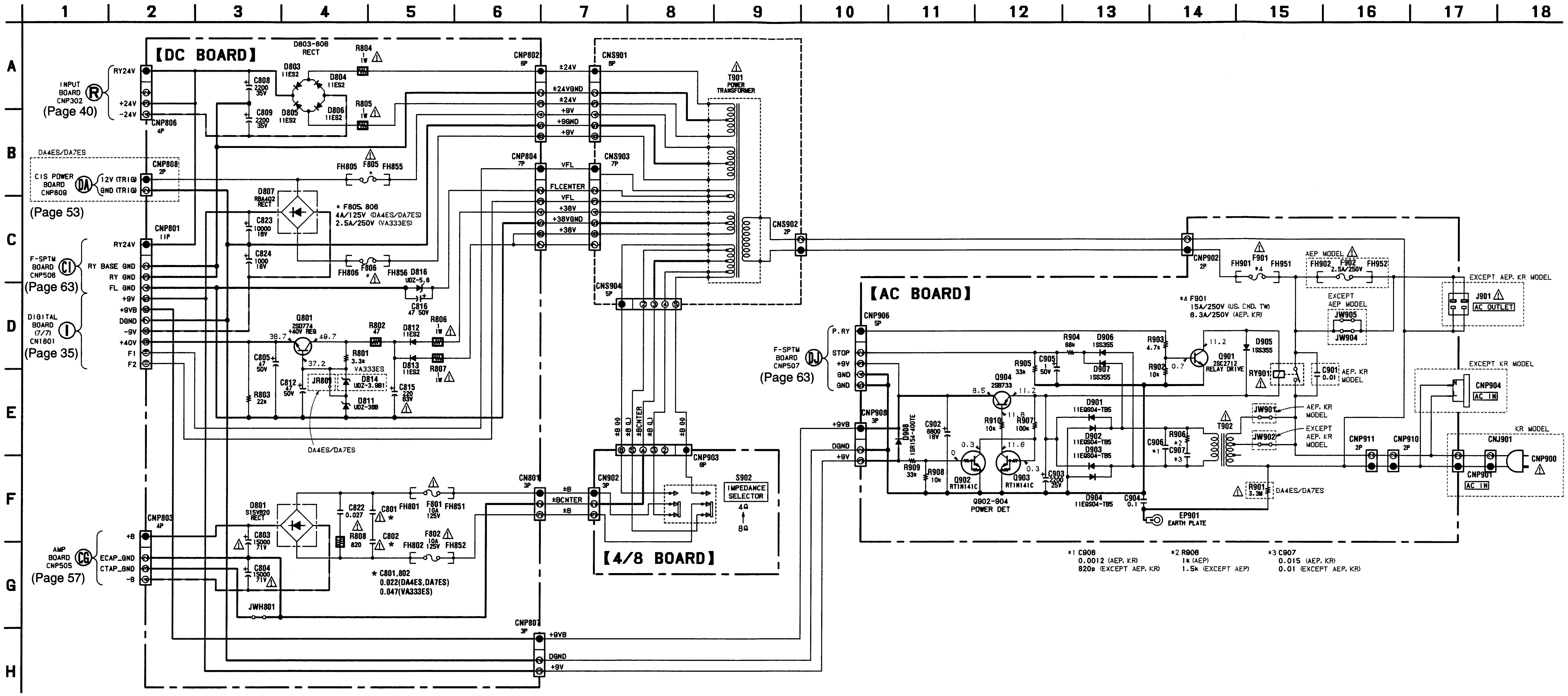
I
J
K
【F-SPTM BOARD】
AMP BOARD CNP503 (Page 57)
CB
CN505 6P
FL
FL GND
FR GND
FR
C GND
CENTER
L651
R655 4.7
RY601 CENTER RY
R634 10
D607 1SS355TE
Q611 2SC2712-YG -TE85L RELAY DRIVE
0
0.7
R632 10k
L501
R511 4.7
RY503 FRONT A RY
R584 10
D598 1SS355TE
Q598 2SC2712-YG -TE85L RELAY DRIVE
R585 10k
L551
R561 4.7
RY661 FRNT B RY
R644 10
D667 1SS355TE
Q621 2SC2712-YG -TE85L RELAY DRIVE
R642 10k
DC BOARD CNP801 (Page 65)
CI
CNP506 5P
FL GND
RY GND
RY BASE GND
RY 24V
AMP BOARD CN504 (Page 57)
CD
CNP502 7P
FL GND
HP RY
RY GND
RY BASE GND
+24V
PROTECTOR
ACMUTE
TM601 2P
C694 0.01
R698 10
C695 470p
CENTER
SPEAKERS
C561 0.01
R562 10
C563 470p
C511 0.01
R512 10
C564 470p
TM501 8P
R
L
A
FRONT
R
C566 470p
C565 470p
CNP507 6P
P.RY
STOP
NC
GND
GND
DJ
AC BOARD CNP906 (Page 65)
CNS506 15P
AC MUTE
PROTECTOR
HP RY
FRONT B RY
SB.L. RY
CENTER RY
REAR RY
FRONT A RY
GND
GND
NC
STOP
P.RY
SB.R.RY
C
DIGITAL BOARD (1/7) CN2105 (Page 29)
R589 4.7k
R645 4.7k
R683 4.7k
R633 4.7k
R733 4.7k
R586 4.7k
R617 4.7k
D545 1SS355TE
D544 1SS355TE
D543 1SS355TE
D542 1SS355TE
D541 1SS355TE
D540 1SS355TE
D546 1SS355TE
CNP651 7P
CNP652 8P
【S-SPTM BOARD】
AMP BOARD CNP702 (Page 57)
CE
AMP BOARD CN504 (Page 57)
CF
CN703 8P
SL
SL GND
SR GND
SR
SB R
SB R GND
SB L GND
SB L
L701
R731 4.7
L751
R781 4.7
L652
R670 4.7
L601
R631 4.7
RY702 REAR RY
R734 10
D707 1SS355TE
Q707 2SC2712-YG -TE85L RELAY DRIVE
R732 10k
RY652 SB R RY
R619 10
D608 1SS355TE
Q602 2SC2712-YG -TE85L RELAY DRIVE
R618 10k
RY651 SB L RY
R684 10
D657 1SS355TE
Q661 2SC2712-YG -TE85L RELAY DRIVE
R682 10k
C765 0.01
R766 10
C613 470p
C715 0.01
R716 10
C713 470p
TM701 8P
R
L
SURROUND
SPEAKERS
SURR BACK
C714 470p
R666 10
C614 470p
R616 10
C665 0.01
C615 0.01

6-40. PRINTED WIRING BOARDS — POWER SECTION —

- Refer to page 65 for Semiconductor Location.
- Refer to page 27 for Circuit Boards Location.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
【DC BOARD】
【AC BOARD】
【4/8 BOARD】
J901
AC OUTLET
DA4ES/DA7ES
VA333ES
R802
R807
R806
FH806
F806
FH856
F856
FH855
R805
R804
D807
CNP807
JW808
C806
C808
C804
FH802
F802
FH852
FH801
F801
FH851
LP803
LP802
CN812
CNP811
F-SPTM BOARD CNP506 (Page 62)
CI
DIGITAL BOARD CN1801 (Page 37)
I
INPUT BOARD CNP302 (Page 39)
R
CIS POWER BOARD CNP809 (Page 52)
DA
CG
AMP BOARD CNP505 (Page 56)
1-685-484-
11 (11)
KR MODEL
CNP901
AC IN
CNP902
CNP904
CNP909
EXCEPT KR MODEL
CNP910
CNP911
C901
EXCEPT AEP, KR MODEL
JW902
AEP, KR MODEL
JW901
JW908
RY901
D905
T902
JW906
JW907
F901
F902
JW904
JW905
AEP MODEL
EXCEPT AEP MODEL
R901
DA4ES/DA7ES
C902
R904
R910
R903
JW909
JW911
JW913
D907
C904
CNP906
CNP905
1-685-473-
11 (11)
DJ
F-SPTM BOARD CNP507 (Page 62)
T1
POWER TRANSFORMER
CNS901
CNS903
CNS902
CNS904
1
7
5
2
CNP903
IMPEDANCE SELECTOR
8Ω
1-685-494-
11 (11)

6-41. SCHEMATIC DIAGRAM — POWER SECTION —

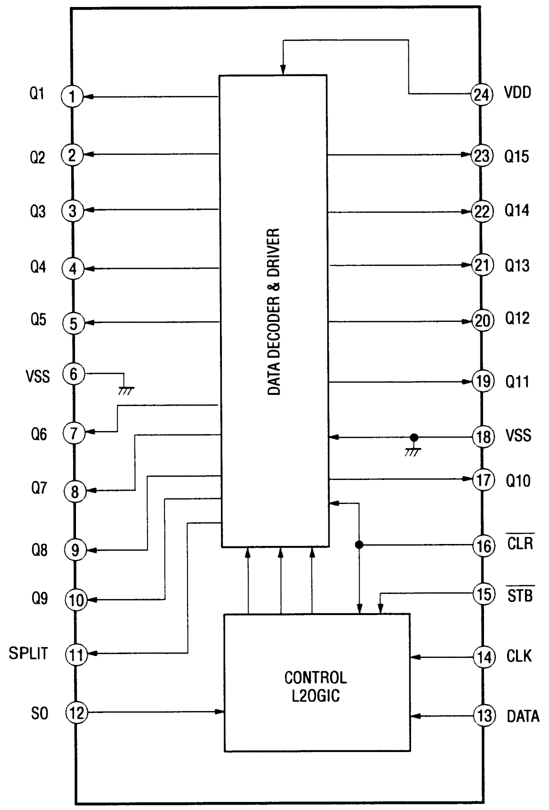

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
A
B
C
D
E
F
G
H
【DC BOARD】
【AC BOARD】
【4/8 BOARD】
INPUT BOARD CNP302
(Page 40)
DA4ES/DA7ES
CIS POWER BOARD CNP809
12V (TRIG)
GND (TRIG)
(Page 53)
F-SPTM BOARD CNP506
(Page 63)
DIGITAL BOARD (7/7) CN1801
(Page 35)
AMP BOARD CNP505
(Page 57)
F-SPTM BOARD CNP507
(Page 63)
CNP806
CNP808
CNP801
CNP803
CNP802
CNP804
CN801
CNP807
CNS901
CNS903
CNS902
CNS904
CN902
CNP903
CNP906
CNP908
CNP902
CNP911
CNP910
CNP904
CNJ901
CNP900
CNP901
T901 POWER TRANSFORMER
T902
S902 IMPEDANCE SELECTOR
4Ω
8Ω
D803-806 RECT
D807 RBA402 RECT
D801 S15VB20 RECT
Q801 2SD774 +40V REG
Q901 2SC2712 RELAY DRIVE
Q902-904 POWER DET
RY901
EP901 EARTH PLATE
J901 AC OUTLET
AC IN
* F805, 806 4A/125V (DA4ES/DA7ES) 2.5A/250V (VA333ES)
* C801, 802 0.022(DA4ES,DA7ES) 0.047(VA333ES)
*4 F901 15A/250V (US, CND, TW) 6.3A/250V (AEP, KR)
*1 C908 0.0012 (AEP, KR) 820p (EXCEPT AEP, KR)
*2 R908 1k (AEP) 1.5k (EXCEPT AEP)
*3 C907 0.015 (AEP, KR) 0.01 (EXCEPT AEP, KR)
EXCEPT AEP, KR MODEL
EXCEPT KR MODEL
KR MODEL
AEP MODEL
EXCEPT AEP MODEL
JW801
JWH801
JW901
JW902
JW904
JW905

• Semiconductor Location

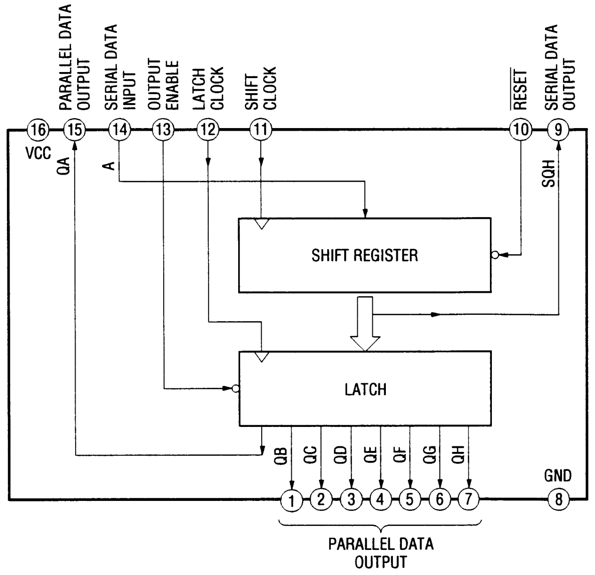
Ref. No.	Location	Ref. No.	Location
D801	E-4	D903	G-9
D803	D-4	D904	G-9
D804	D-4	D905	E-11
D805	D-4	D906	F-9
D806	D-4	D907	G-10
D807	C-4	D908	G-12
D811	B-3		
D812	B-5	Q801	B-3
D813	B-5	Q901	F-11
D814	B-3	Q902	F-12
D816	B-4	Q903	F-12
D901	G-9	Q904	F-11
D902	G-9		

6-42. IC BLOCK DIAGRAMS

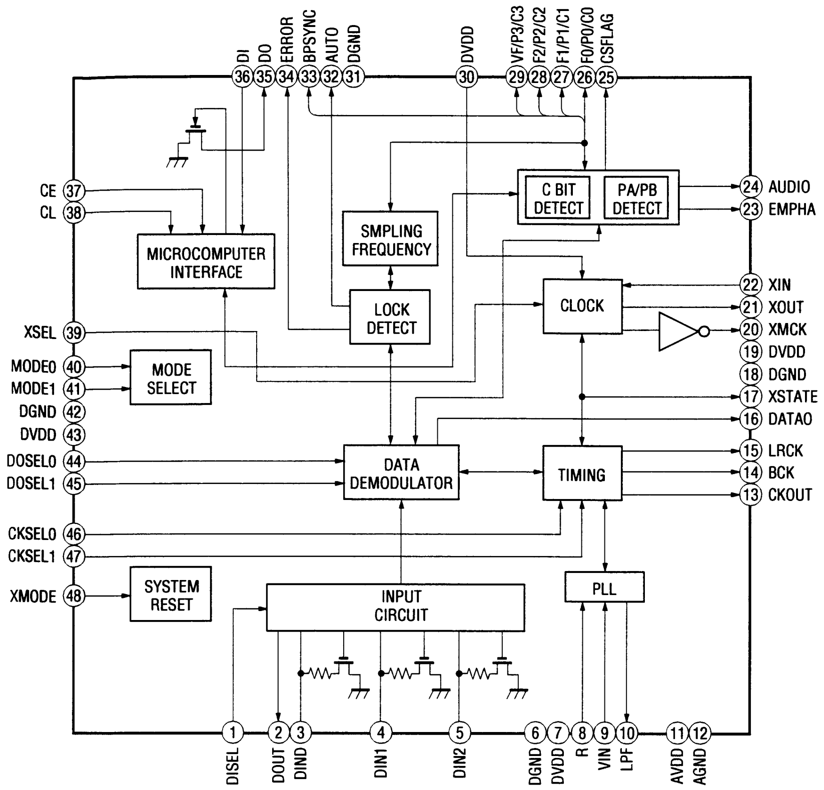
IC2103 NJU3716M (DIGITAL BOARD)
IC102 NJU3716M (DISPLAY BOARD)


Q1 1
Q2 2
Q3 3
Q4 4
Q5 5
VSS 6
Q6 7
Q7 8
Q8 9
Q9 10
SPLIT 11
S0 12
24 VDD
23 Q15
22 Q14
21 Q13
20 Q12
19 Q11
18 VSS
17 Q10
16 CLR
15 STB
14 CLK
13 DATA
DATA DECODER & DRIVER
CONTROL L2OGIC

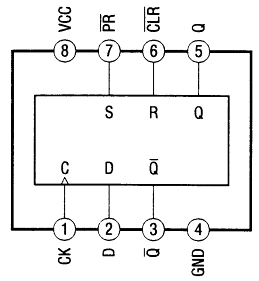
IC2109 TC74HC595AF (DIGITAL BOARD)


PARALLEL DATA OUTPUT
SERIAL DATA INPUT
OUTPUT ENABLE
LATCH CLOCK
SHIFT CLOCK
RESET
SERIAL DATA OUTPUT
16 15 14 13 12 11 10 9
VCC
QA
A
SQH
SHIFT REGISTER
LATCH
QB QC QD QE QF QG QH
GND
1 2 3 4 5 6 7 8
PARALLEL DATA OUTPUT

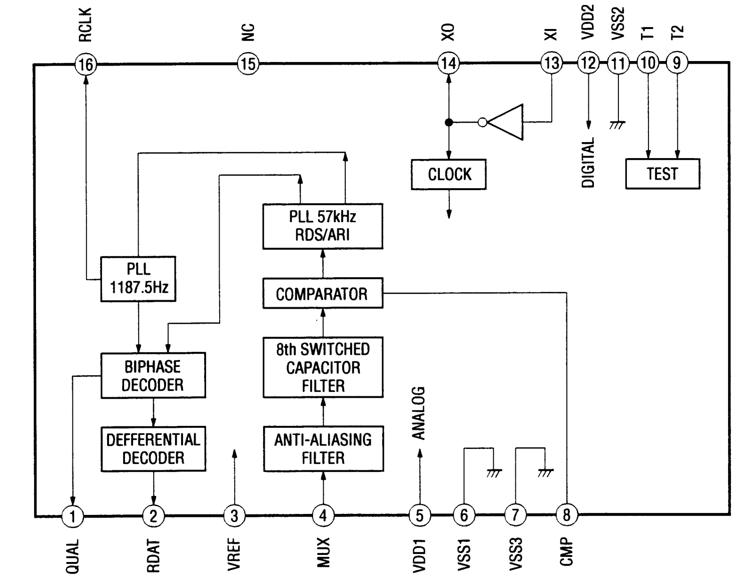
IC1101 LC89056W-E (DIGITAL BOARD)


DI DO ERROR BPSYNC AUTO DGND
36 35 34 33 32 31
DVDD 30
VF/P3/C3 F2/P2/C2 F1/P1/C1 F0/P0/C0 CSFLAG
29 28 27 26 25
CE 37
CL 38
XSEL 39
MODE0 40
MODE1 41
DGND 42
DVDD 43
DOSEL0 44
DOSEL1 45
CKSEL0 46
CKSEL1 47
XMODE 48
MICROCOMPUTER INTERFACE
SMPLING FREQUENCY
LOCK DETECT
C BIT DETECT
PA/PB DETECT
CLOCK
MODE SELECT
DATA DEMODULATOR
TIMING
SYSTEM RESET
INPUT CIRCUIT
PLL
24 AUDIO
23 EMPHA
22 XIN
21 XOUT
20 XMCK
19 DVDD
18 DGND
17 XSTATE
16 DATAO
15 LRCK
14 BCK
13 CKOUT
1 DISEL
2 DOUT
3 DIND
4 DIN1
5 DIN2
6 DGND
7 DVDD
8 R
9 VIN
10 LPF
11 AVDD
12 AGND

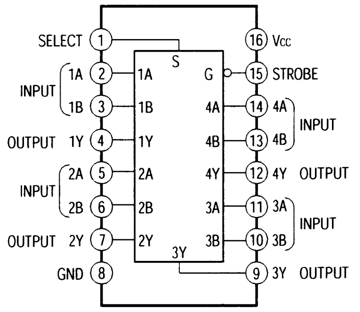
IC1102 TC7WH74FU (DIGITAL BOARD)


VCC 8
PR 7
CLR 6
Q 5
S R Q
C D Q̄
1 CK
2 D
3 Q̄
4 GND

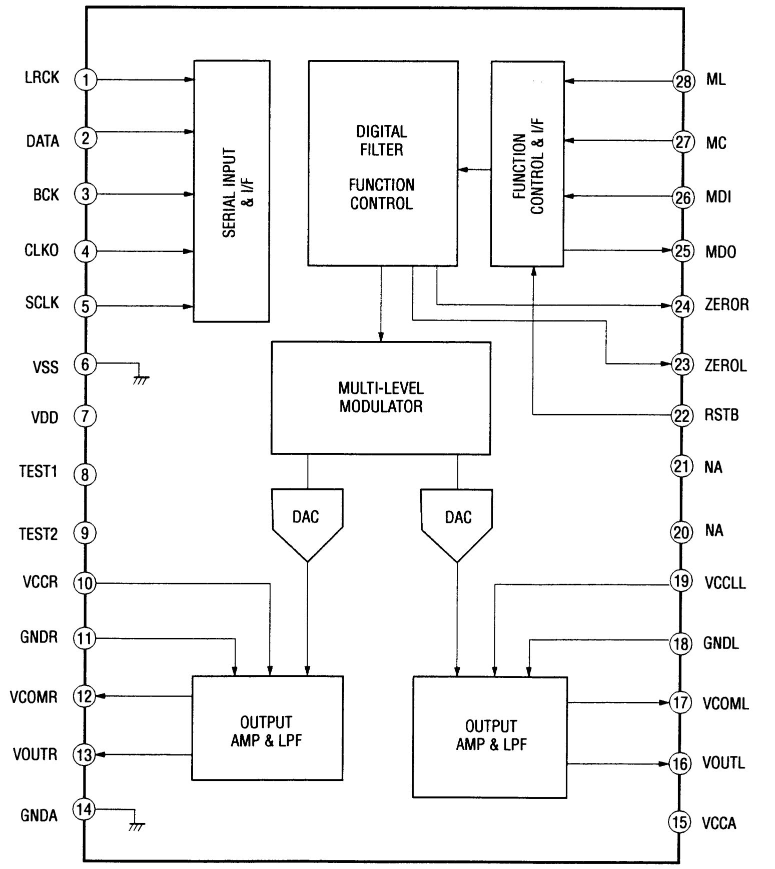
IC2101 BU1924F (DIGITAL BOARD)


RCLK 16
NC 15
XO 14
XI 13
VDD2 12
VSS2 11
T1 10
T2 9
CLOCK
DIGITAL
TEST
PLL 57kHz RDS/ARI
PLL 1187.5Hz
COMPARATOR
8th SWITCHED CAPACITOR FILTER
BIPHASE DECODER
DEFFERENTIAL DECODER
ANTI-ALIASING FILTER
ANALOG
1 QUAL
2 RDAT
3 VREF
4 MUX
5 VDD1
6 VSS1
7 VSS3
8 CMP

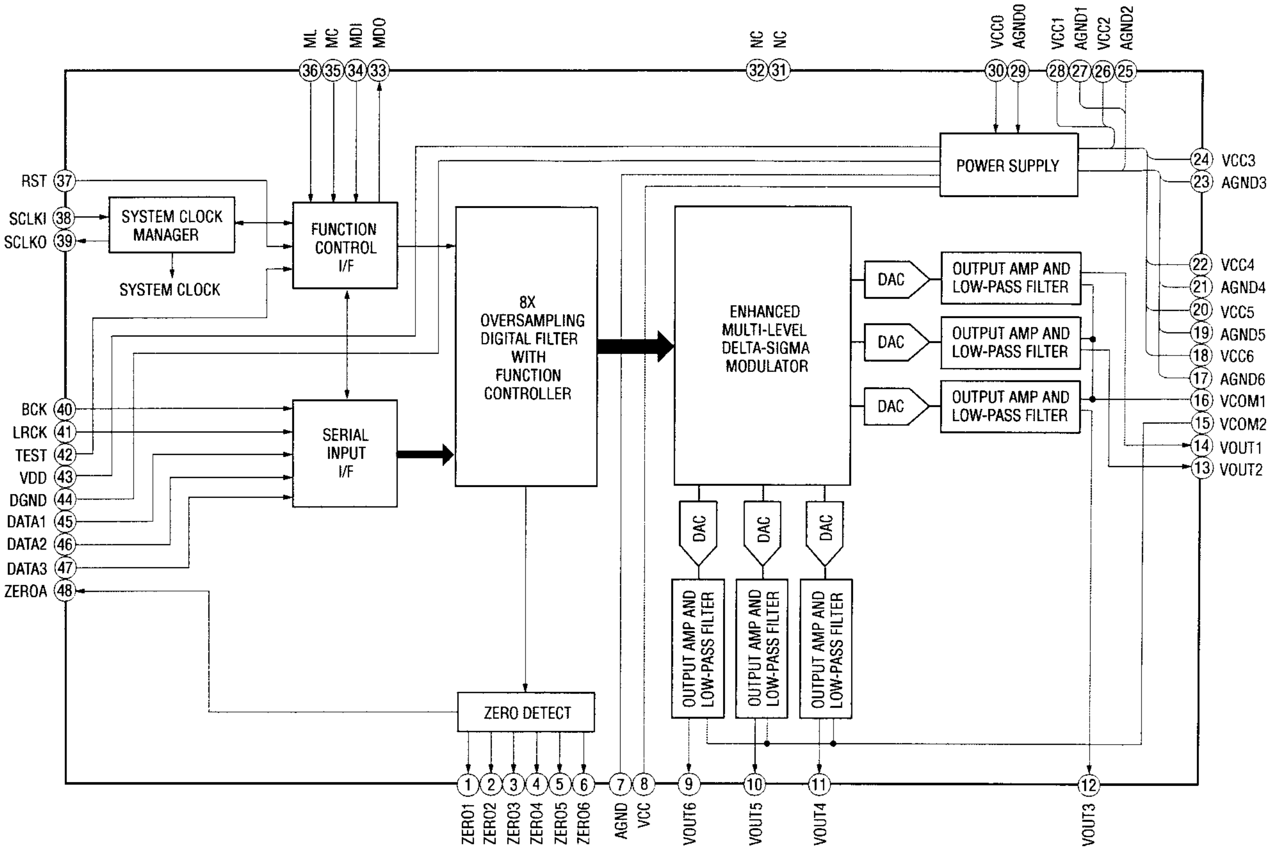
IC1104 TC7WH157FU (DIGITAL BOARD)
IC1205 TC7WH157FU (DIGITAL BOARD)


SELECT 1
INPUT 1A 2
1B 3
OUTPUT 1Y 4
INPUT 2A 5
2B 6
OUTPUT 2Y 7
GND 8
16 Vcc
15 STROBE
14 4A INPUT
13 4B
12 4Y OUTPUT
11 3A INPUT
10 3B
9 3Y OUTPUT
S G
1A 1B 1Y 2A 2B 2Y 3Y
4A 4B 4Y 3A 3B

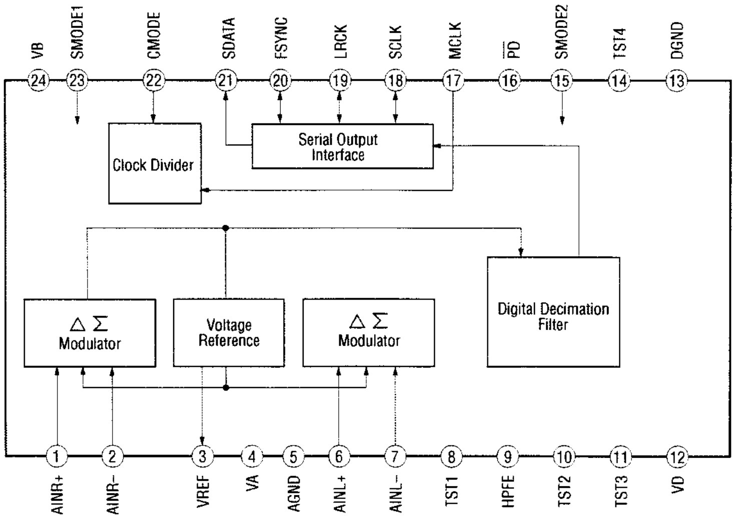
IC1601 PCM1737E-1/2K (DIGITAL BOARD)


LRCK 1
DATA 2
BCK 3
CLKO 4
SCLK 5
VSS 6
VDD 7
TEST1 8
TEST2 9
VCCR 10
GNDR 11
VCOMR 12
VOUTR 13
GNDA 14
SERIAL INPUT & I/F
DIGITAL FILTER
FUNCTION CONTROL
FUNCTION CONTROL & I/F
MULTI-LEVEL MODULATOR
DAC
DAC
OUTPUT AMP & LPF
OUTPUT AMP & LPF
28 ML
27 MC
26 MDI
25 MDO
24 ZEROR
23 ZEROL
22 RSTB
21 NA
20 NA
19 VCCLL
18 GNDL
17 VCOML
16 VOUTL
15 VCCA

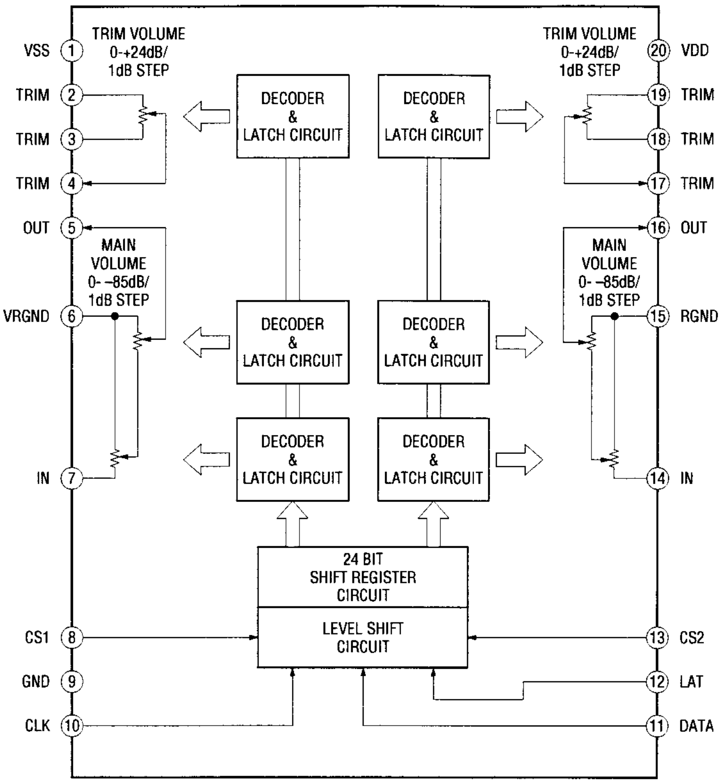
IC1602 PCM1604Y/2K (DIGITAL BOARD)


ML
MC
MDI
MDO
NC
NC
VCC0
AGND0
VCC1
AGND1
VCC2
AGND2
RST
SCLKI
SCLKO
SYSTEM CLOCK MANAGER
SYSTEM CLOCK
FUNCTION CONTROL I/F
8X OVERSAMPLING DIGITAL FILTER WITH FUNCTION CONTROLLER
ENHANCED MULTI-LEVEL DELTA-SIGMA MODULATOR
POWER SUPPLY
VCC3
AGND3
DAC
OUTPUT AMP AND LOW-PASS FILTER
VCC4
AGND4
VCC5
AGND5
VCC6
AGND6
VCOM1
VCOM2
VOUT1
VOUT2
BCK
LRCK
TEST
VDD
DGND
DATA1
DATA2
DATA3
ZEROA
SERIAL INPUT I/F
ZERO DETECT
ZERO1
ZERO2
ZERO3
ZERO4
ZERO5
ZERO6
AGND
VCC
VOUT6
VOUT5
VOUT4
VOUT3

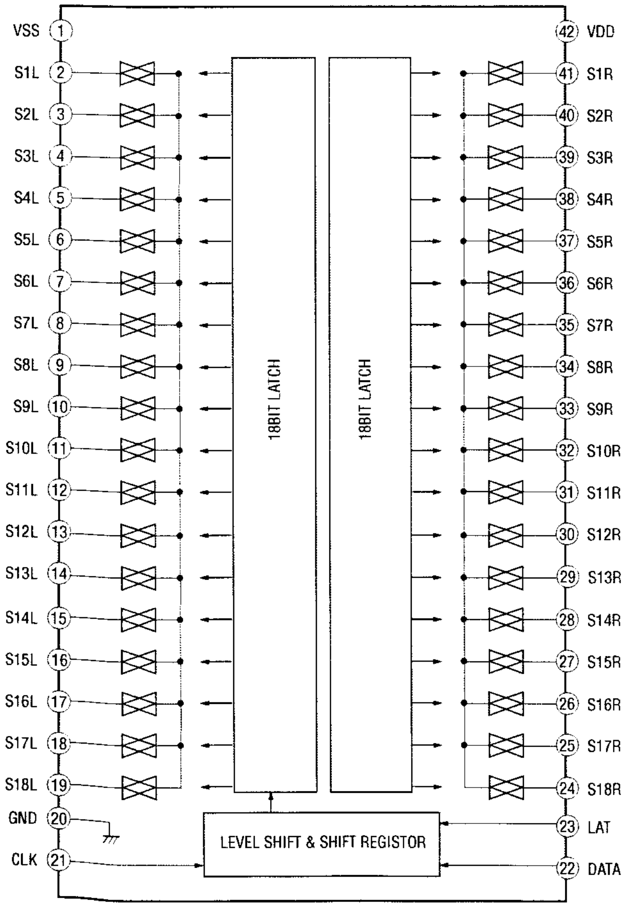
IC1701 AK5352-VF-E2 (DIGITAL BOARD)


VB
SMODE1
CMODE
SDATA
FSYNC
LRCK
SCLK
MCLK
PD
SMODE2
TST4
DGND
Clock Divider
Serial Output Interface
Digital Decimation Filter
ΔΣ Modulator
Voltage Reference
ΔΣ Modulator
AINR+
AINR–
VREF
VA
AGND
AINL+
AINL–
TST1
HPFE
TST2
TST3
VD

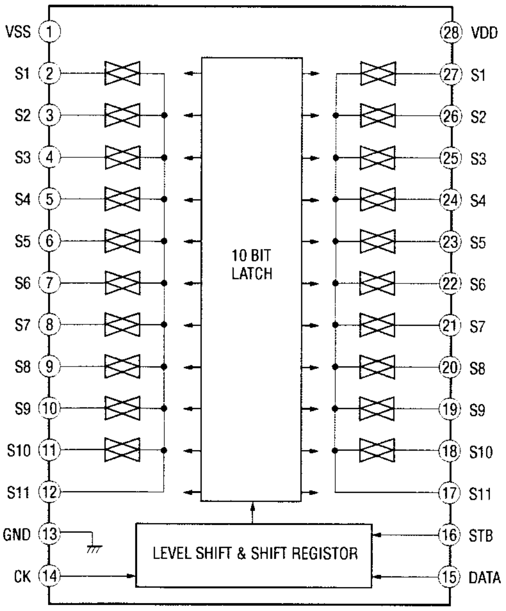
IC311 TC94A07 (INPUT BOARD)
IC411 TC94A07 (E-VOL BOARD)


VSS ①
TRIM ②
TRIM ③
TRIM ④
OUT ⑤
VRGND ⑥
IN ⑦
CS1 ⑧
GND ⑨
CLK ⑩
⑳ VDD
⑲ TRIM
⑱ TRIM
⑰ TRIM
⑯ OUT
⑮ RGND
⑭ IN
⑬ CS2
⑫ LAT
⑪ DATA
TRIM VOLUME 0-+24dB/ 1dB STEP
TRIM VOLUME 0-+24dB/ 1dB STEP
MAIN VOLUME 0- -85dB/ 1dB STEP
MAIN VOLUME 0- -85dB/ 1dB STEP
DECODER & LATCH CIRCUIT
DECODER & LATCH CIRCUIT
DECODER & LATCH CIRCUIT
DECODER & LATCH CIRCUIT
DECODER & LATCH CIRCUIT
DECODER & LATCH CIRCUIT
24 BIT SHIFT REGISTER CIRCUIT
LEVEL SHIFT CIRCUIT

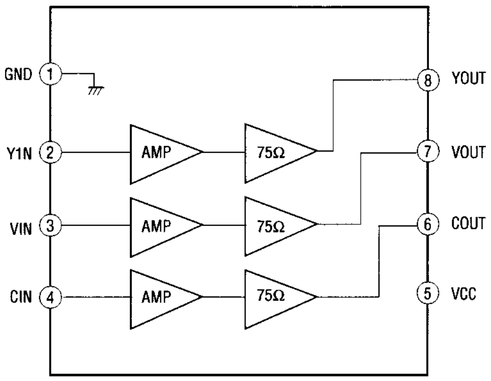
IC302 TC9274N-015 (INPUT BOARD)
IC303 TC9274N-015 (INPUT BOARD)
IC402 TC9274N-016 (E-VOL BOARD)


VSS ①
S1L ②
S2L ③
S3L ④
S4L ⑤
S5L ⑥
S6L ⑦
S7L ⑧
S8L ⑨
S9L ⑩
S10L ⑪
S11L ⑫
S12L ⑬
S13L ⑭
S14L ⑮
S15L ⑯
S16L ⑰
S17L ⑱
S18L ⑲
GND ⑳
CLK ㉑
㊷ VDD
㊶ S1R
㊵ S2R
㊴ S3R
㊳ S4R
㊲ S5R
㊱ S6R
㉟ S7R
㉞ S8R
㉝ S9R
㉜ S10R
㉛ S11R
㉚ S12R
㉙ S13R
㉘ S14R
㉗ S15R
㉖ S16R
㉕ S17R
㉔ S18R
㉓ LAT
㉒ DATA
18BIT LATCH
18BIT LATCH
LEVEL SHIFT & SHIFT REGISTOR

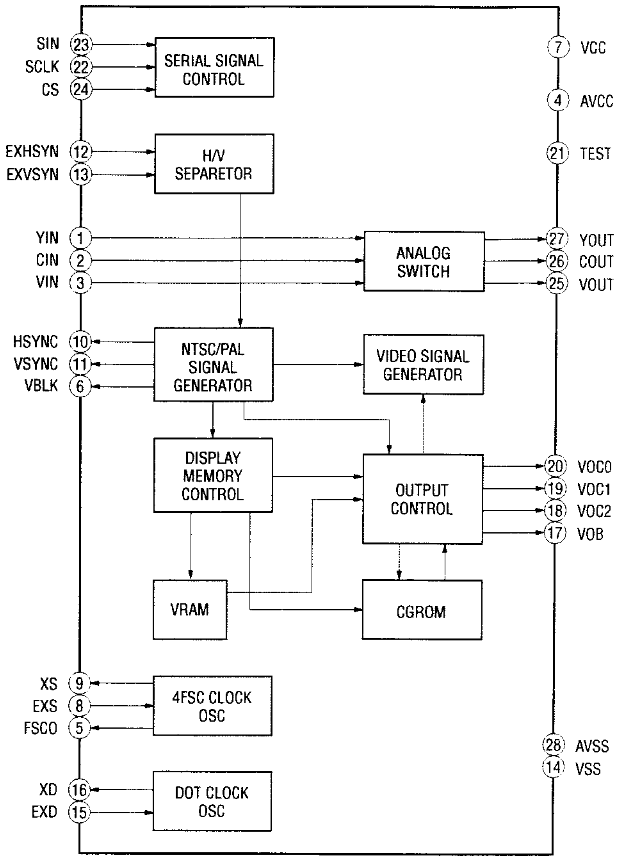
IC304 TC9273N-013 (INPUT BOARD)


VSS ①
S1 ②
S2 ③
S3 ④
S4 ⑤
S5 ⑥
S6 ⑦
S7 ⑧
S8 ⑨
S9 ⑩
S10 ⑪
S11 ⑫
GND ⑬
CK ⑭
㉘ VDD
㉗ S1
㉖ S2
㉕ S3
㉔ S4
㉓ S5
㉒ S6
㉑ S7
⑳ S8
⑲ S9
⑱ S10
⑰ S11
⑯ STB
⑮ DATA
10 BIT LATCH
LEVEL SHIFT & SHIFT REGISTOR

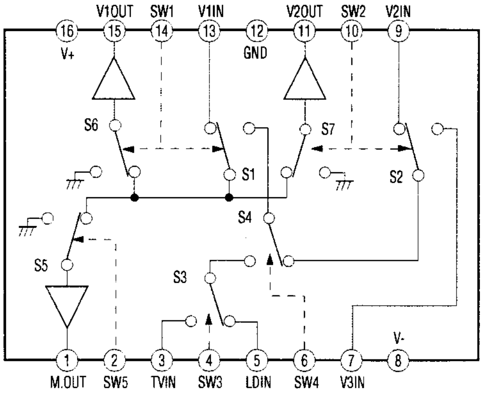
IC210 BA7622F (S-VIDEO BOARD)


GND ①
Y1N ②
VIN ③
CIN ④
AMP
AMP
AMP
75Ω
75Ω
75Ω
⑧ YOUT
⑦ VOUT
⑥ COUT
⑤ VCC

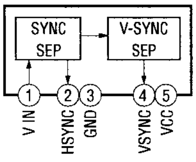
IC209 MB90089PF-G-238-BND (S-VIDEO BOARD)


SIN ㉓
SCLK ㉒
CS ㉔
SERIAL SIGNAL CONTROL
EXHSYN ⑫
EXVSYN ⑬
H/V SEPARETOR
YIN ①
CIN ②
VIN ③
ANALOG SWITCH
HSYNC ⑩
VSYNC ⑪
VBLK ⑥
NTSC/PAL SIGNAL GENERATOR
VIDEO SIGNAL GENERATOR
DISPLAY MEMORY CONTROL
OUTPUT CONTROL
VRAM
CGROM
XS ⑨
EXS ⑧
FSCO ⑤
4FSC CLOCK OSC
XD ⑯
EXD ⑮
DOT CLOCK OSC
⑦ VCC
④ AVCC
㉑ TEST
㉗ YOUT
㉖ COUT
㉕ VOUT
⑳ VOC0
⑲ VOC1
⑱ VOC2
⑰ VOB
㉘ AVSS
⑭ VSS

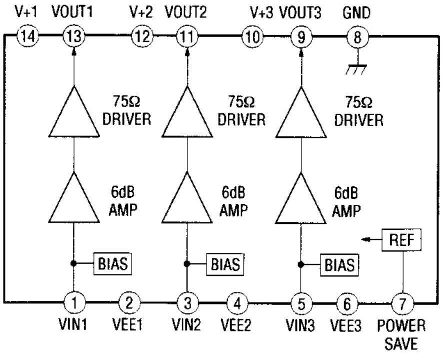
IC202 NJM2296M (S-VIDEO BOARD)
IC201 NJM2296M (C-VIDEO BOARD)
IC211 NJM2296M (C-VIDEO BOARD)


V1OUT
SW1
V1IN
V2OUT
SW2
V2IN
⑯
⑮
⑭
⑬
⑫
⑪
⑩
⑨
V+
GND
S6
S7
S1
S2
S4
S5
S3
V-
①
②
③
④
⑤
⑥
⑦
⑧
M.OUT
SW5
TVIN
SW3
LDIN
SW4
V3IN

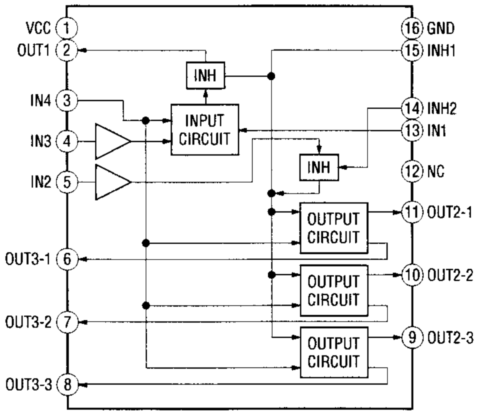
IC204 LA7213 (S-VIDEO BOARD)
IC205 LA7213 (S-VIDEO BOARD)


SYNC SEP
V-SYNC SEP
①
②
③
④
⑤
V IN
HSYNC
GND
VSYNC
VCC

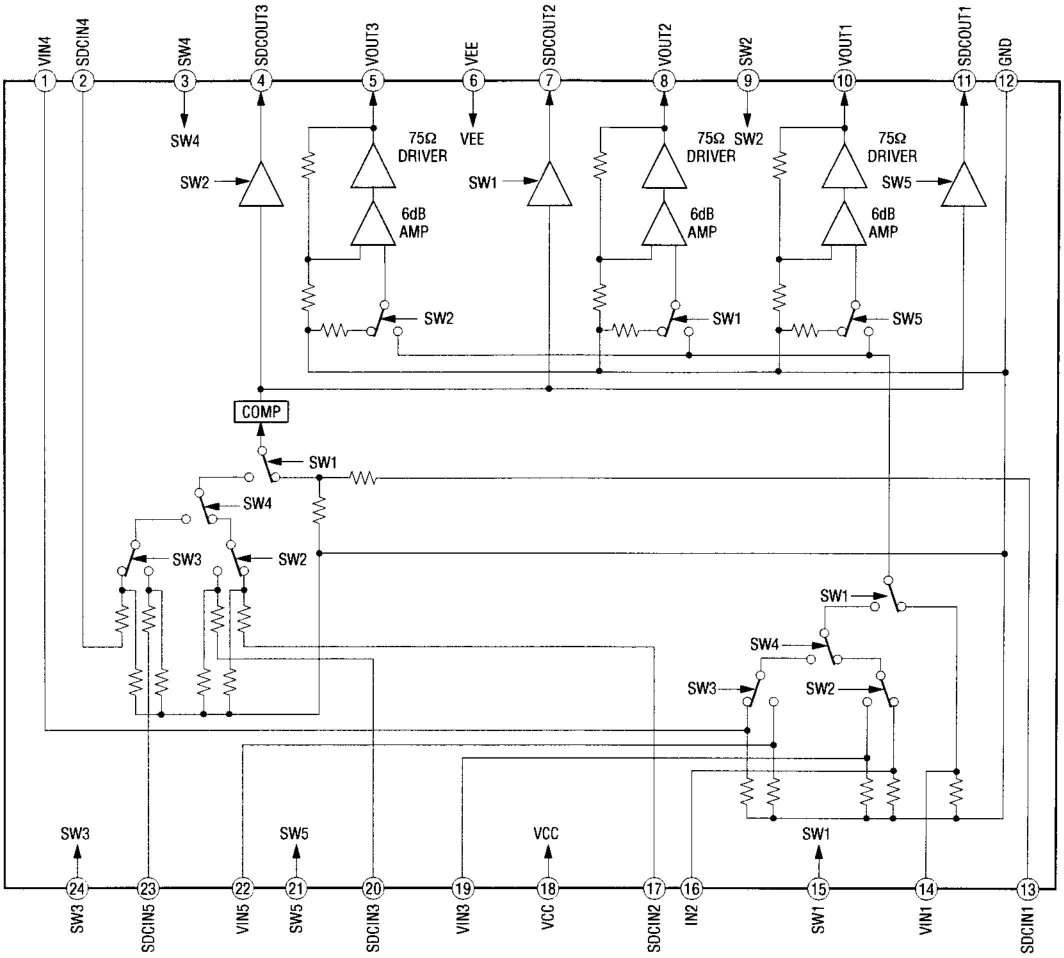
IC212 NJM2581D (C-VIDEO BOARD)


V+1
VOUT1
V+2
VOUT2
V+3
VOUT3
GND
⑭
⑬
⑫
⑪
⑩
⑨
⑧
75Ω DRIVER
75Ω DRIVER
75Ω DRIVER
6dB AMP
6dB AMP
6dB AMP
BIAS
BIAS
BIAS
REF
①
②
③
④
⑤
⑥
⑦
VIN1
VEE1
VIN2
VEE2
VIN3
VEE3
POWER SAVE

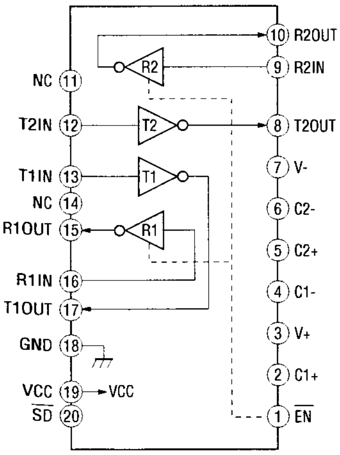
IC200 NJM2145M (M-BUS BOARD)


VCC ①
OUT1 ②
IN4 ③
IN3 ④
IN2 ⑤
OUT3-1 ⑥
OUT3-2 ⑦
OUT3-3 ⑧
INH
INPUT CIRCUIT
INH
OUTPUT CIRCUIT
OUTPUT CIRCUIT
OUTPUT CIRCUIT
⑯ GND
⑮ INH1
⑭ INH2
⑬ IN1
⑫ NC
⑪ OUT2-1
⑩ OUT2-2
⑨ OUT2-3

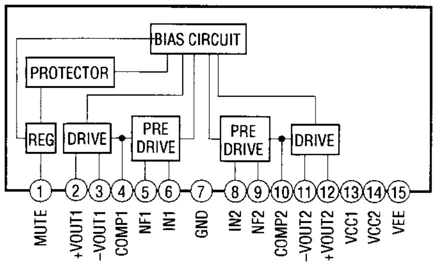
IC203 NJM2596M (S-VIDEO BOARD)


VIN4
SDCIN4
SW4
SDCOUT3
VOUT3
VEE
SDCOUT2
VOUT2
SW2
VOUT1
SDCOUT1
GND
75Ω DRIVER
6dB AMP
SW1
SW2
SW3
SW4
SW5
COMP
VCC
SW3
SDCIN5
VIN5
SW5
SDCIN3
VIN3
VCC
SDCIN2
IN2
SW1
VIN1
SDCIN1

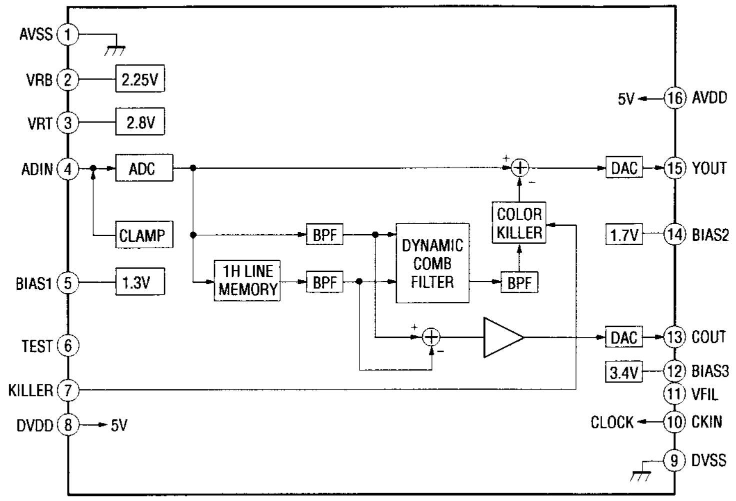
IC401 ADM3222 (E-VOL BOARD)


R2OUT
R2IN
T2OUT
V-
C2-
C2+
C1-
V+
C1+
EN
NC
T2IN
T1IN
NC
R1OUT
R1IN
T1OUT
GND
VCC
SD
R2
T2
T1
R1
VCC

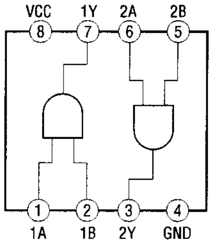
IC601 μPC2581V (A-CLASS BOARD)
IC701 μPC2581V (A-CLASS BOARD)
IC501 μPC2581V (AMP BOARD)
IC651 μPC2581V (AMP BOARD)


BIAS CIRCUIT
PROTECTOR
REG
DRIVE
PRE DRIVE
PRE DRIVE
DRIVE
MUTE
+VOUT1
-VOUT1
COMP1
NF1
IN1
GND
IN2
NF2
COMP2
-VOUT2
+VOUT2
VCC1
VCC2
VEE

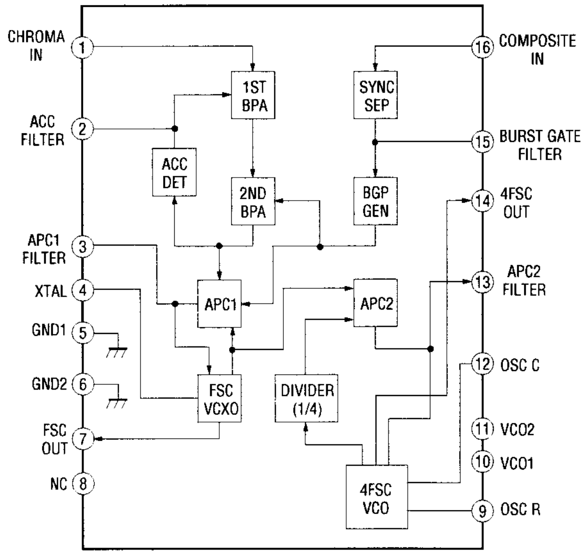
IC3100 TC90A45F (UP CONVERT BOARD)


AVSS ①
VRB ②
2.25V
VRT ③
2.8V
ADIN ④
ADC
CLAMP
BIAS1 ⑤
1.3V
1H LINE MEMORY
BPF
BPF
DYNAMIC COMB FILTER
COLOR KILLER
BPF
TEST ⑥
KILLER ⑦
DVDD ⑧
5V
5V
⑯ AVDD
DAC
⑮ YOUT
1.7V
⑭ BIAS2
DAC
⑬ COUT
3.4V
⑫ BIAS3
⑪ VFIL
CLOCK
⑩ CKIN
⑨ DVSS

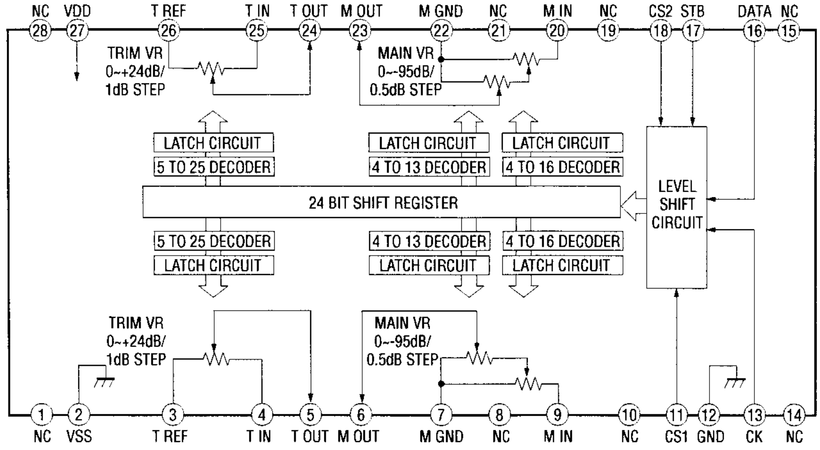
IC1008 TC7WH08FU (DIGITAL INPUT BOARD)


VCC
1Y
2A
2B
⑧
⑦
⑥
⑤
①
②
③
④
1A
1B
2Y
GND

IC3101 MM1093NF (UP CONVERT BOARD)


CHROMA IN ①
ACC FILTER ②
APC1 FILTER ③
XTAL ④
GND1 ⑤
GND2 ⑥
FSC OUT ⑦
NC ⑧
1ST BPA
ACC DET
2ND BPA
SYNC SEP
BGP GEN
APC1
APC2
FSC VCXO
DIVIDER (1/4)
4FSC VCO
⑯ COMPOSITE IN
⑮ BURST GATE FILTER
⑭ 4FSC OUT
⑬ APC2 FILTER
⑫ OSC C
⑪ VCO2
⑩ VCO1
⑨ OSC R

IC403 CXD9725M (E-VOL BOARD)
IC404 CXD9725M (E-VOL BOARD)
IC405 CXD9725M (E-VOL BOARD)
IC406 CXD9725M (E-VOL BOARD)


NC ㉘
VDD ㉗
T REF ㉖
T IN ㉕
T OUT ㉔
M OUT ㉓
M GND ㉒
NC ㉑
M IN ⑳
NC ⑲
CS2 ⑱
STB ⑰
DATA ⑯
NC ⑮
TRIM VR 0~+24dB/ 1dB STEP
MAIN VR 0~-95dB/ 0.5dB STEP
LATCH CIRCUIT
5 TO 25 DECODER
LATCH CIRCUIT
4 TO 13 DECODER
LATCH CIRCUIT
4 TO 16 DECODER
24 BIT SHIFT REGISTER
LEVEL SHIFT CIRCUIT
5 TO 25 DECODER
LATCH CIRCUIT
4 TO 13 DECODER
LATCH CIRCUIT
4 TO 16 DECODER
LATCH CIRCUIT
TRIM VR 0~+24dB/ 1dB STEP
MAIN VR 0~-95dB/ 0.5dB STEP
① NC
② VSS
③ T REF
④ T IN
⑤ T OUT
⑥ M OUT
⑦ M GND
⑧ NC
⑨ M IN
⑩ NC
⑪ CS1
⑫ GND
⑬ CK
⑭ NC

SECTION 7
EXPLODED VIEWS

NOTE:

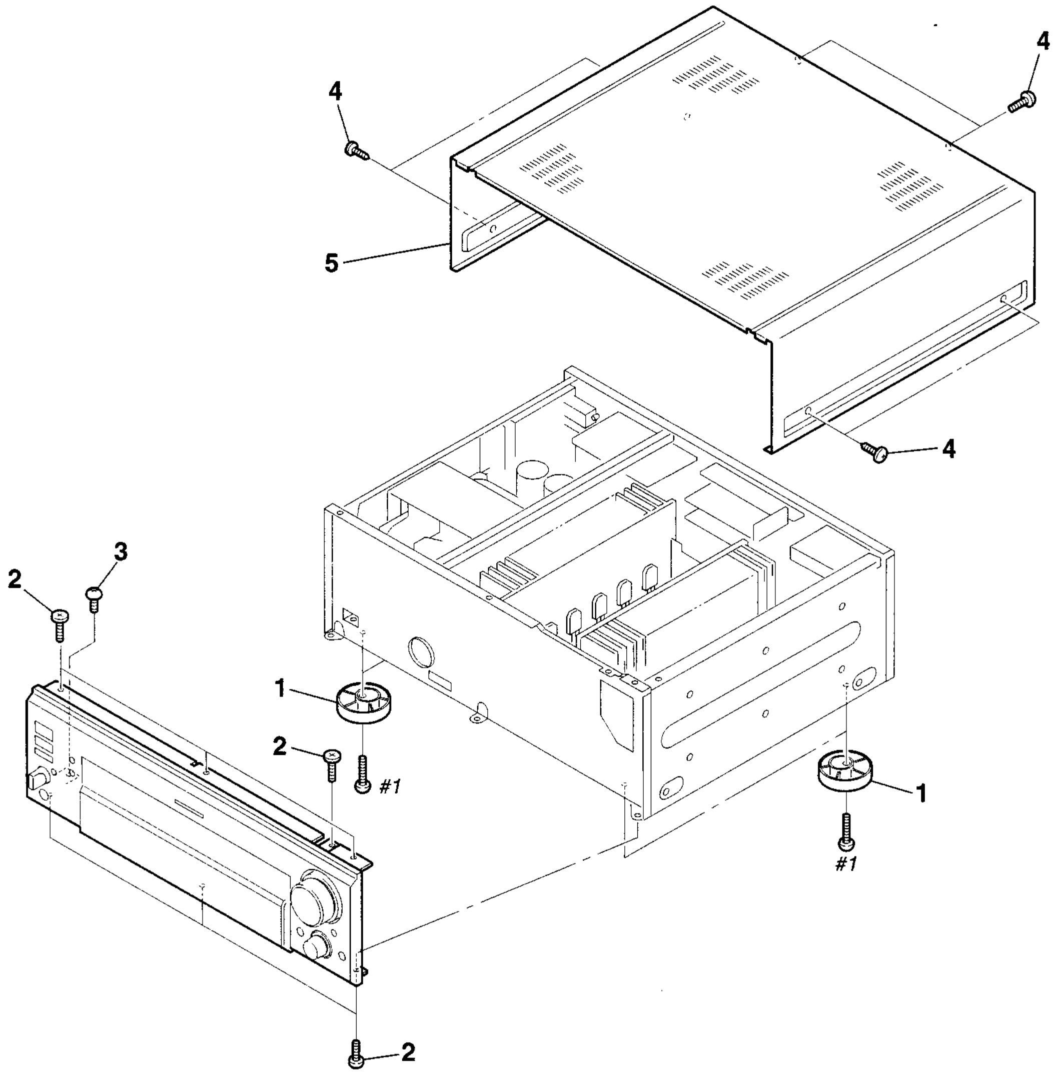
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND : Canadian model
  TW : Taiwan model
  KR : Korea model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

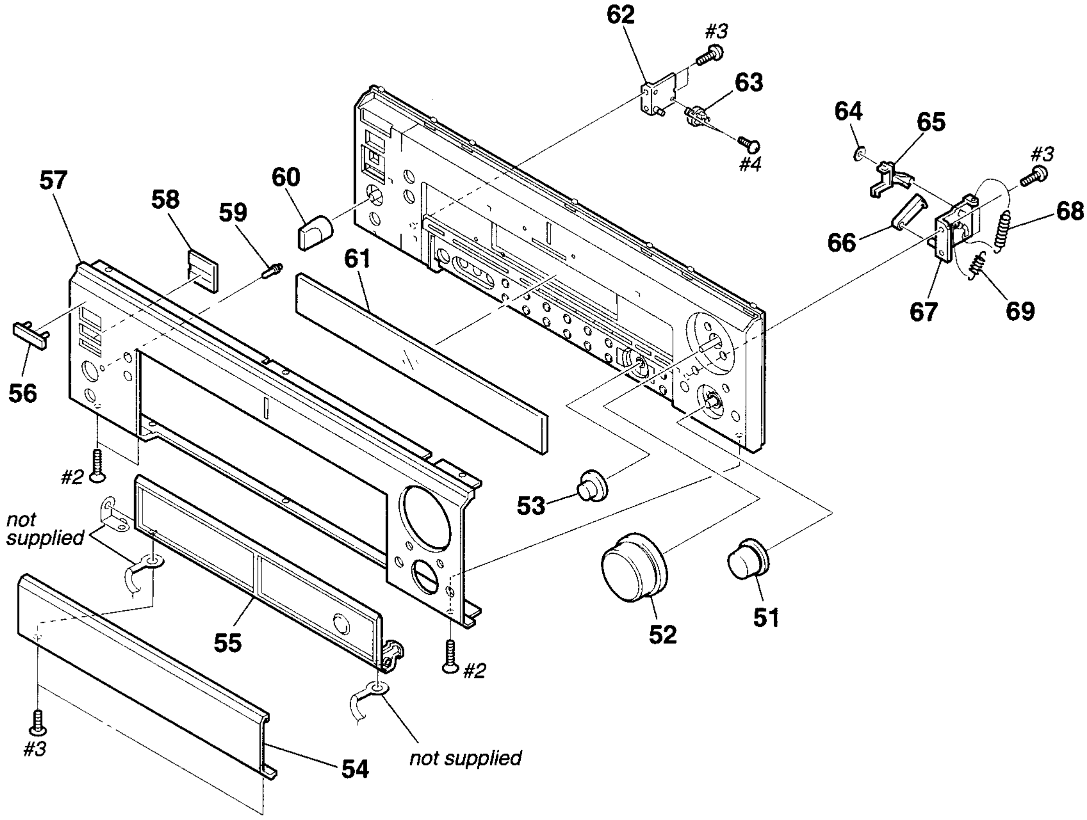
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	X-4953-883-2	FOOT ASSY	
2	3-704-515-21	SCREW (BV/RING)	
3	4-974-510-11	SCREW (+BV 3X8 CU)	
4	4-227-843-01	SCREW (TP), FLAT HEAD (BLACK)...(BLACK)	
4	4-227-843-11	SCREW (TP), FLAT HEAD (GOLD)...(GOLD)	
5	4-222-052-71	CASE (GOLD)...(GOLD)	
5	4-222-052-91	CASE (BLACK)...(BLACK)	
#1	7-685-885-09	SCREW +BVTT 4X16 (S)	

7-2. FRONT PANEL SECTION (1)



Ref. No.	Part No.	Description	Remark
51	X-4951-912-1	KNOB (BAL) ASSY (BLACK)...(BLACK)	
51	X-4951-913-1	KNOB (BAL) ASSY (GOLD)...(GOLD)	
52	X-4954-943-1	KNOB (R54/B) ASSY (BLACK)...(BLACK)	
52	X-4954-944-1	KNOB (R54/N) ASSY (GOLD)...(GOLD)	
53	4-228-859-01	KNOB (JOG) (BLACK)...(BLACK)	
53	4-228-859-11	KNOB (JOG) (GOLD)...(GOLD)	
54	4-240-814-01	PANEL (DOOR) (DA7ES)	
54	4-240-814-11	PANEL (DOOR) (DA4ES)	
54	4-240-814-21	PANEL (DOOR) (AEP:BLACK)	
54	4-240-814-31	PANEL (DOOR) (AEP:GOLD)	
54	4-240-814-41	PANEL (DOOR) (TW,KR)	
55	4-228-839-03	DOOR (BASE) (BLACK)...(BLACK)	
55	4-228-839-12	DOOR (BASE) (GOLD)...(GOLD)	
56	4-942-568-41	EMBLEM (NO.5), SONY (BLACK)	
57	4-240-815-01	PANEL (D7), FRONT (DA7ES)	
57	4-240-815-11	PANEL (D7), FRONT (DA4ES)	
57	4-240-815-21	PANEL (D7), FRONT (VA333ES:BLACK)	
57	4-240-815-31	PANEL (D7), FRONT (VA333ES:GOLD)	
58	4-228-862-11	WINDOW (IR) (GOLD)...(GOLD)	
58	4-234-092-01	WINDOW (IR) (BLACK)...(BLACK)	
59	X-4950-462-1	LENS ASSY, LED (DA4ES/DA7ES)	
60	4-957-383-01	KNOB (F14) (BLACK)...(BLACK)	
60	4-957-383-21	KNOB (F14) (GOLD)...(GOLD)	
61	4-234-224-11	PLATE (B), INDICATION (BLACK)...(BLACK)	
61	4-234-225-11	PLATE (M), INDICATION (GOLD)...(GOLD)	
62	X-4952-961-1	BRACKET (DL) ASSY	
63	4-240-391-01	DAMPER, OIL	
64	3-167-330-01	WASHER	
65	4-228-857-01	ARM, DOOR LOCK	
66	4-228-858-01	ARM	
67	X-4952-962-1	BRACKET (DR) ASSY	
68	4-228-860-01	SPRING, TENSION	
69	4-228-861-01	SPRING, TENSION	
#2	7-685-536-19	SCREW +BTP 2.6X12 TYPE2 N-S	
#3	7-685-234-19	SCREW +KTP 2.6X8 TYPE2 NON-SLIT	
#4	7-685-853-04	SCREW +BVTT 2X6 (S)	

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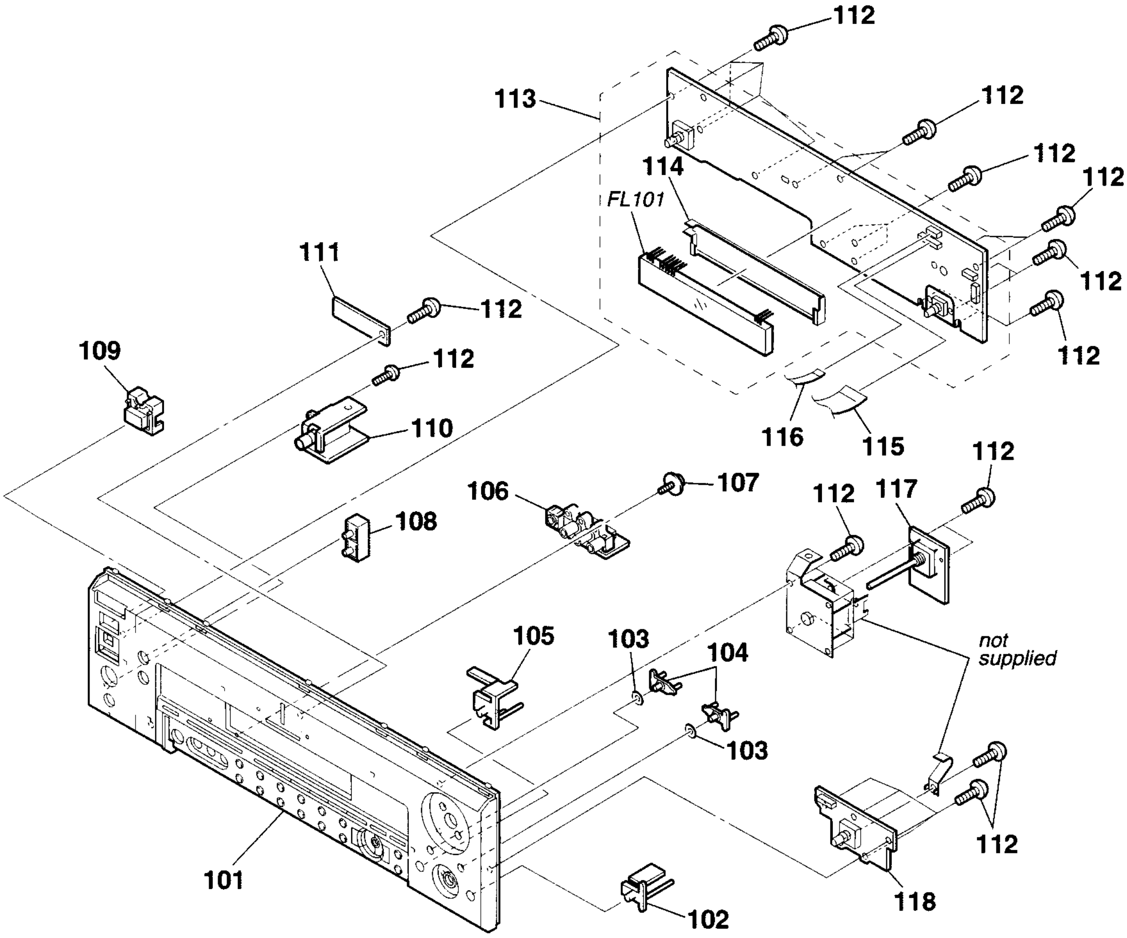
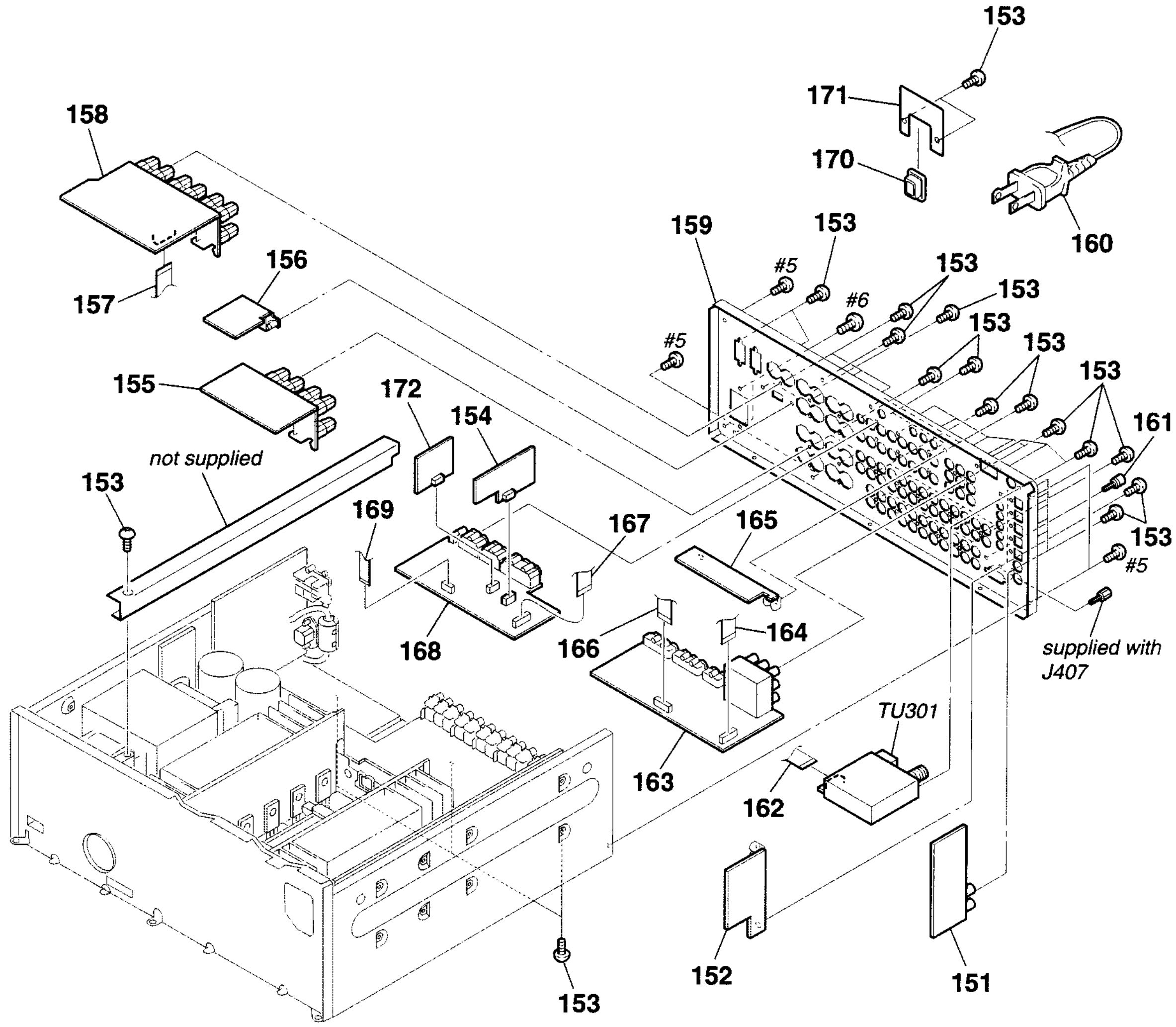
7-3. FRONT PANEL SECTION (2)



Ref. No.	Part No.	Description	Remark
101	X-4954-795-1	BASE (B) ASSY, PANEL (BLACK)...(BLACK)	(DA7ES)
101	X-4954-796-1	BASE (B) ASSY, PANEL (BLACK)...(BLACK)	(DA4ES)
101	X-4954-797-1	BASE (N) ASSY, PANEL (GOLD)...(GOLD)	(AEP:GOLD)
101	X-4954-799-1	BASE (B) ASSY, PANEL (BLACK)...(BLACK)	(AEP:BLACK)
101	X-4954-800-1	BASE (N) ASSY, PANEL (GOLD)...(GOLD)	(TW,KR)
102	4-228-849-01	BUTTON (E) (BLACK)...(BLACK)	
102	4-228-849-11	BUTTON (E) (GOLD)...(GOLD)	
103	4-228-856-01	PLATE (BUTTON F), SHADING	
104	4-228-850-01	BUTTON (F)	
105	4-228-848-01	BUTTON (D) (BLACK)...(BLACK)	
105	4-228-848-11	BUTTON (D) (GOLD)...(GOLD)	
106	1-685-490-11	VIDEO3 BOARD	
107	4-933-134-11	SCREW (+PTPWH M2.6X8)	
108	X-4953-779-1	BUTTON (G) (B) ASSY (BLACK)...(BLACK)	
108	X-4953-780-1	BUTTON (G) (N) ASSY (GOLD)...(GOLD)	
109	4-998-592-01	BUTTON (POWER) (BLACK)...(BLACK)	
109	4-998-592-12	BUTTON (POWER) (GOLD)...(GOLD)	
110	1-685-488-11	HP BOARD	
111	1-685-491-11	LED BOARD	
112	4-951-620-01	SCREW (2.6X8), +BVTP	
113	A-4728-901-A	DISPLAY BOARD, COMPLETE (VA333ES)	
113	A-4728-931-A	DISPLAY BOARD, COMPLETE (DA4ES/DA7ES)	
114	4-228-836-01	HOLDER, FL TUBE	
115	1-773-162-11	WIRE (FLAT TYPE) (21 CORE)	
116	1-773-021-11	WIRE (FLAT TYPE) (15 CORE)	
117	1-685-489-11	VOLUME BOARD	
118	1-685-487-11	FUNCTION BOARD	
FL101	1-518-747-11	INDICATOR TUBE, FLUORESCENT	

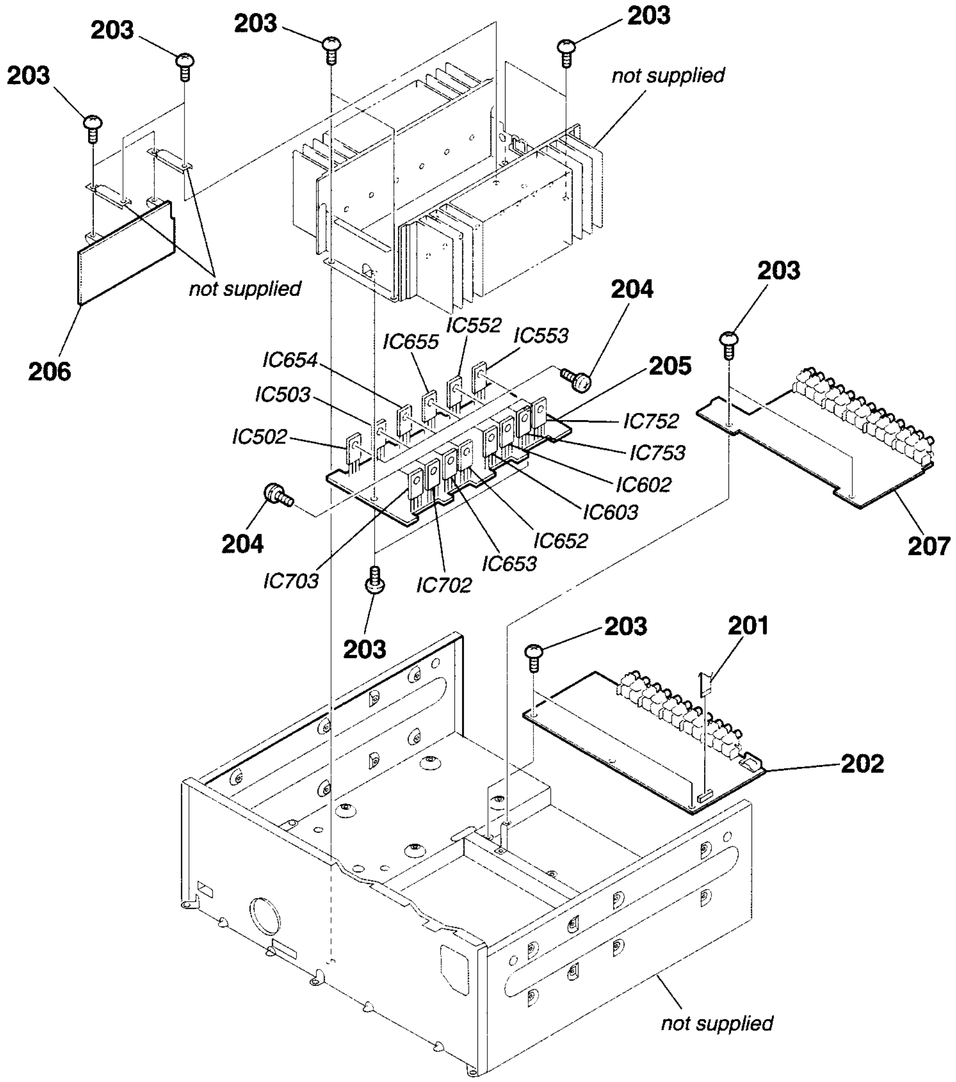
7-4. REAR SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	A-4728-944-A	DIGITAL INPUT BOARD, COMPLETE (DA4ES/DA7ES)	
151	A-4728-979-A	DIGITAL INPUT BOARD, COMPLETE (VA333ES)	
152	A-4728-882-A	CIS BOARD, COMPLETE (DA4ES)	
152	A-4728-921-A	CIS BOARD, COMPLETE (DA7ES)	
153	4-974-510-11	SCREW (+BV 3X8 CU)	
154	A-4728-955-A	UP CONVERT BOARD, COMPLETE (DA4ES/DA7ES)	
155	A-4728-941-A	S-SPTM BOARD, COMPLETE (DA4ES/DA7ES)	
155	A-4728-905-A	S-SPTM BOARD, COMPLETE (VA333ES)	
156	1-685-494-11	4/8 BOARD	
157	1-773-021-11	WIRE (FLAT TYPE) (15 CORE)	
158	A-4728-904-A	F-SPTM BOARD, COMPLETE (VA333ES)	
158	A-4728-940-A	F-SPTM BOARD, COMPLETE (DA4ES/DA7ES)	
159	4-234-163-01	PANEL (V5), BACK (DA4ES)	
159	4-234-163-41	PANEL (V5), BACK (AEP)	
⚠160	1-769-079-22	CORD, POWER (KR)	
161	4-947-010-01	SCREW, FEEDER FIXED	
162	1-823-582-11	WIRE (FLAT TYPE) (15 CORE)	
163	A-4728-909-A	C-VIDEO BOARD, COMPLETE (AEP)	
163	A-4728-951-A	C-VIDEO BOARD, COMPLETE (DA4ES/DA7ES)	
163	A-4729-682-A	C-VIDEO BOARD, COMPLETE (TW,KR)	
164	1-769-971-11	WIRE (FLAT TYPE) (13 CORE)	
165	A-4728-919-A	M-BUS BOARD, COMPLETE (DA4ES/DA7ES)	
166	1-769-969-11	WIRE (FLAT TYPE) (13 CORE)	
167	1-769-975-11	WIRE (FLAT TYPE) (13 CORE)	
168	A-4728-903-A	S-VIDEO BOARD, COMPLETE (AEP)	
168	A-4728-938-A	S-VIDEO BOARD, COMPLETE (DA4ES/DA7ES)	
168	A-4728-965-A	S-VIDEO BOARD, COMPLETE (TW,KR)	
169	1-769-879-11	WIRE (FLAT TYPE) (7 CORE) (DA4ES/DA7ES)	
* 170	3-703-244-00	BUSHING (2104), CORD (KR)	
* 171	4-923-873-01	BRACKET, CORD STOPPER (KR)	
172	A-4728-895-A	CLOCK BOARD, COMPLETE (AEP)	
TU301	1-693-539-21	TUNER PACK (FM/AM) (DA4ES/DA7ES)	
TU301	1-693-540-21	TUNER PACK (FM/AM) (VA333ES)	
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#6	7-685-659-79	SCREW +BVTP 4X8 TYPE2 IT-3	

7-5. CHASSIS SECTION (1)


203
203
203
203
not supplied
not supplied
206
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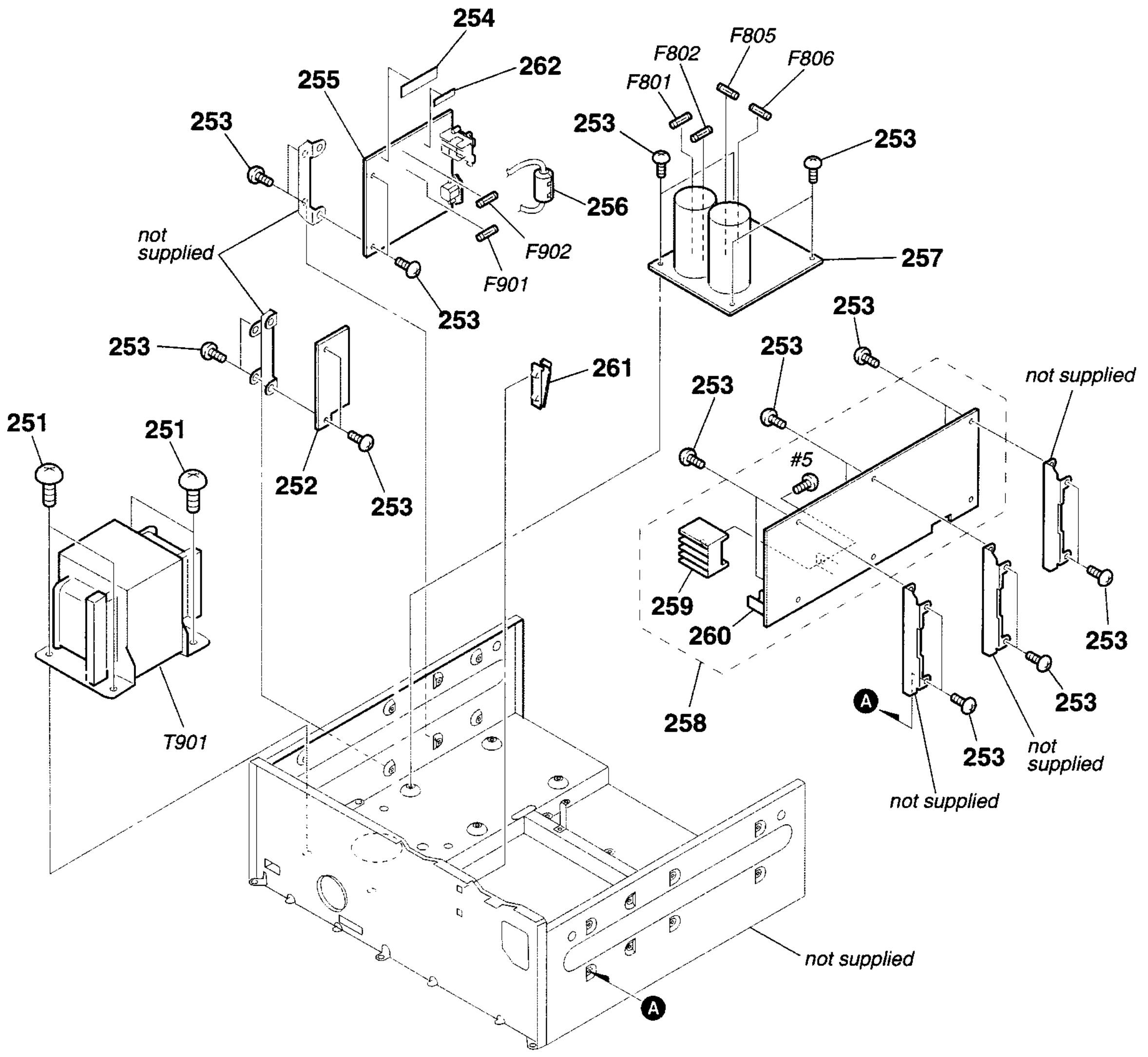
203
IC655
IC552
IC553
IC654
IC503
IC502
205
IC752
IC753
IC602
IC603
IC652
IC653
204
207
IC703
IC702
203
203
201
202
not supplied

Ref. No.	Part No.	Description	Remark
201	1-769-971-11	WIRE (FLAT TYPE) (13 CORE)	
202	A-4728-878-A	E-VOL BOARD, COMPLETE (DA4ES)	
202	A-4728-891-A	E-VOL BOARD, COMPLETE (VA333ES)	
202	A-4728-911-A	E-VOL BOARD, COMPLETE (DA7ES)	
203	4-974-510-11	SCREW (+BV 3X8 CU)	
204	3-905-609-11	SCREW (TRANSISTOR)	
205	A-4728-907-A	AMP BOARD, COMPLETE (VA333ES)	
205	A-4728-947-A	AMP BOARD, COMPLETE (DA4ES/DA7ES)	
206	A-4729-679-A	A-CLASS BOARD, COMPLETE (DA4ES/DA7ES)	
206	A-4729-681-A	A-CLASS BOARD, COMPLETE (VA333ES)	
207	A-4728-880-A	INPUT BOARD, COMPLETE (DA4ES)	
207	A-4728-893-A	INPUT BOARD, COMPLETE (VA333ES)	
207	A-4728-915-A	INPUT BOARD, COMPLETE (DA7ES)	
IC502	8-749-014-72	IC SAP15N	
IC503	8-749-014-73	IC SAP15P	
IC552	8-749-014-72	IC SAP15N	
IC553	8-749-014-73	IC SAP15P	
IC602	8-749-014-72	IC SAP15N	
IC603	8-749-014-73	IC SAP15P	
IC652	8-749-014-72	IC SAP15N	
IC653	8-749-014-73	IC SAP15P	
IC654	8-749-014-72	IC SAP15N	
IC655	8-749-014-73	IC SAP15P	
IC702	8-749-014-72	IC SAP15N	
IC703	8-749-014-73	IC SAP15P	
IC752	8-749-014-72	IC SAP15N	
IC753	8-749-014-73	IC SAP15P	

7-6. CHASSIS SECTION (2)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
251	4-394-596-01	SCREW (M5), TERMINAL	
252	A-4729-692-A	CIS POWER BOARD, COMPLETE (DA4ES/DA7ES)	
253	4-974-510-11	SCREW (+BV 3X8 CU)	
* 254	3-703-044-26	LABEL, CAUTION (DA4ES/DA7ES)	
255	A-4728-908-A	AC BOARD, COMPLETE (AEP)	
255	A-4728-949-A	AC BOARD, COMPLETE (DA4ES/DA7ES)	
255	A-4728-966-A	AC BOARD, COMPLETE (KR)	
255	A-4728-985-A	AC BOARD, COMPLETE (TW)	
256	1-469-241-11	CORE, FERRITE (RFC-8 BK)	
257	A-4728-899-A	DC BOARD, COMPLETE (VA333ES)	
257	A-4728-927-A	DC BOARD, COMPLETE (DA4ES/DA7ES)	
258	A-4728-884-A	DIGITAL BOARD, COMPLETE (DA4ES)	
258	A-4728-897-A	DIGITAL BOARD, COMPLETE (AEP)	
258	A-4728-923-A	DIGITAL BOARD, COMPLETE (DA7ES)	
258	A-4728-962-A	DIGITAL BOARD, COMPLETE (TW,KR)	
* 259	3-309-144-21	HEAT SINK	
260	4-242-610-11	HEAT SINK (10) (DA4ES/DA7ES)	
261	4-308-119-02	HOLDER, WIRE	
262	3-701-946-31	LABEL, FUSE RATING (KR,TW)	

Ref. No.	Part No.	Description	Remark
⚠F801	1-533-312-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(10A/125V)
⚠F802	1-533-312-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(10A/125V)
⚠F805	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V) (VA333ES)	
⚠F805	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(4A/125V) (DA4ES/DA7ES)
⚠F806	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V) (VA333ES)	
⚠F806	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(4A/125V) (DA4ES/DA7ES)
⚠F901	1-532-325-00	FUSE, TIME-LAG (T6.3AL/250V) (AEP,KR)	
⚠F901	1-576-379-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(15A/250V) (US,CND,TW)
⚠F902	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V) (AEP)	
⚠T901	1-437-270-11	TRANSFORMER, POWER (US)	
⚠T901	1-437-271-11	TRANSFORMER, POWER (DA4ES:CND)	
⚠T901	1-437-272-11	TRANSFORMER, POWER (TW)	
⚠T901	1-437-274-11	TRANSFORMER, POWER (AEP,KR)	
⚠T901	1-437-872-11	TRANSFORMER, POWER (DA7ES:CND)	
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

A-CLASS

SECTION 8
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable

When indicating parts by reference number, please include the board.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA.. : μA.. uPA.. : μPA..
  uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviation
  CND : Canadian model
  TW : Taiwan model
  KR : Korea model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
	A-4729-679-A	A-CLASS BOARD, COMPLETE (DA4ES/DA7ES)	
	A-4729-681-A	A-CLASS BOARD, COMPLETE (VA333ES)	
		************************	
		< CAPACITOR >	
C591	1-119-851-11	ELECT 22uF 20% 100V	(VA333ES)
C591	1-128-883-11	ELECT 22uF 20% 100V	(DA4ES/DA7ES)
C592	1-119-851-11	ELECT 22uF 20% 100V	(VA333ES)
C592	1-128-883-11	ELECT 22uF 20% 100V	(DA4ES/DA7ES)
C601	1-119-825-41	ELECT 22uF 20% 50V	
C602	1-137-505-11	MYLAR 220PF 5% 50V	
C603	1-102-233-00	CERAMIC 33PF 10% 500V	
C604	1-102-230-00	CERAMIC 4PF 0.25PF 500V	
C605	1-119-779-11	ELECT 220uF 20% 10V	
C610	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C611	1-126-964-11	ELECT 10uF 20% 50V	
C635	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C636	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C639	1-137-503-11	MYLAR 0.0001uF 5% 50V	
C650	1-119-850-11	ELECT 10uF 20% 63V	(VA333ES)
C650	1-128-868-11	ELECT 10uF 20% 63V	(DA4ES/DA7ES)
C651	1-119-825-41	ELECT 22uF 20% 50V	
C652	1-137-505-11	MYLAR 220PF 5% 50V	
C653	1-102-233-00	CERAMIC 33PF 10% 500V	
C654	1-102-230-00	CERAMIC 4PF 0.25PF 500V	
C655	1-119-779-11	ELECT 220uF 20% 10V	
C660	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C661	1-126-964-11	ELECT 10uF 20% 50V	
C689	1-137-503-11	MYLAR 0.0001uF 5% 50V	
C701	1-119-825-41	ELECT 22uF 20% 50V	
C702	1-137-505-11	MYLAR 220PF 5% 50V	
C703	1-102-233-00	CERAMIC 33PF 10% 500V	
C704	1-102-230-00	CERAMIC 4PF 0.25PF 500V	
C705	1-119-779-11	ELECT 220uF 20% 10V	
C710	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C711	1-126-964-11	ELECT 10uF 20% 50V	
C739	1-137-503-11	MYLAR 0.0001uF 5% 50V	
C750	1-119-850-11	ELECT 10uF 20% 63V	(VA333ES)
C750	1-128-868-11	ELECT 10uF 20% 63V	(DA4ES/DA7ES)
C751	1-119-825-41	ELECT 22uF 20% 50V	
C752	1-137-505-11	MYLAR 220PF 5% 50V	
C753	1-102-233-00	CERAMIC 33PF 10% 500V	
C754	1-102-230-00	CERAMIC 4PF 0.25PF 500V	
C755	1-119-779-11	ELECT 220uF 20% 10V	
C760	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C761	1-126-964-11	ELECT 10uF 20% 50V	
C789	1-137-503-11	MYLAR 0.0001uF 5% 50V	
		< CONNECTOR >	
CNP601	1-784-922-11	PIN, CONNECTOR 5P	
CNP603	1-779-978-11	PIN, CONNECTOR 3P	
CNP605	1-770-412-11	CONNECTOR, BOARD TO BOARD 6P	
CNP607	1-770-407-11	CONNECTOR, BOARD TO BOARD 12P	
CNP701	1-784-921-11	PIN, CONNECTOR 4P	
		< DIODE >	
D611	8-719-988-61	DIODE 1SS355TE-17	
D635	8-719-988-61	DIODE 1SS355TE-17	
D661	8-719-988-61	DIODE 1SS355TE-17	
D711	8-719-988-61	DIODE 1SS355TE-17	
D761	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC601	6-700-943-01	IC uPC2581V-S	
IC635	8-759-636-74	IC M5218AP-22	
IC701	6-700-943-01	IC uPC2581V-S	
		< TRANSISTOR >	
Q610	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q635	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q660	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q710	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q760	8-729-281-53	TRANSISTOR 2SC1815-GR	
		< RESISTOR >	
R601	1-208-782-11	RES-CHIP 1K 2% 1/8W	(DA4ES/DA7ES)
R601	1-259-995-11	CARBON MELF 1K 2% 1/8W	(VA333ES)
R602	1-208-571-11	RES-CHIP 68K 2% 1/8W	(DA4ES/DA7ES)
R602	1-260-018-11	CARBON MELF 68K 2% 1/8W	(VA333ES)
R603	1-249-494-11	CARBON 68K 5% 1/2W	

Ref. No.	Part No.	Description			Remark
R604	1-249-683-31	CARBON	2.7K	5%	1/2W
R609	1-216-025-11	RES-CHIP	100	5%	1/10W
R611	1-216-085-11	RES-CHIP	33K	5%	1/10W
R612	1-216-073-00	RES-CHIP	10K	5%	1/10W
R613	1-216-077-11	RES-CHIP	15K	5%	1/10W
R614	1-216-081-00	METAL CHIP	22K	5%	1/10W
R615	1-216-081-00	METAL CHIP	22K	5%	1/10W
R635	1-216-073-00	RES-CHIP	10K	5%	1/10W
R636	1-216-089-11	RES-CHIP	47K	5%	1/10W
R637	1-216-113-00	METAL CHIP	470K	5%	1/10W
R638	1-216-049-11	RES-CHIP	1K	5%	1/10W
R639	1-216-073-00	RES-CHIP	10K	5%	1/10W
R640	1-216-081-00	METAL CHIP	22K	5%	1/10W
R643	1-216-230-00	RES-CHIP	22K	2%	1/8W (DA4ES/DA7ES)
R643	1-260-012-11	CARBON MELF	22K	2%	1/8W (VA333ES)
R651	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R651	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R652	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R652	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R653	1-249-494-11	CARBON	68K	5%	1/2W
R654	1-249-683-31	CARBON	2.7K	5%	1/2W
R657	1-216-085-11	RES-CHIP	33K	5%	1/10W
R658	1-216-073-00	RES-CHIP	10K	5%	1/10W
R659	1-216-025-11	RES-CHIP	100	5%	1/10W
R667	1-216-077-11	RES-CHIP	15K	5%	1/10W
R668	1-216-081-00	METAL CHIP	22K	5%	1/10W
R669	1-216-081-00	METAL CHIP	22K	5%	1/10W
R701	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R701	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R702	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R702	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R703	1-249-494-11	CARBON	68K	5%	1/2W
R704	1-249-683-31	CARBON	2.7K	5%	1/2W
R709	1-216-025-11	RES-CHIP	100	5%	1/10W
R711	1-216-085-11	RES-CHIP	33K	5%	1/10W
R712	1-216-073-00	RES-CHIP	10K	5%	1/10W
R713	1-216-077-11	RES-CHIP	15K	5%	1/10W
R714	1-216-081-00	METAL CHIP	22K	5%	1/10W
R715	1-216-081-00	METAL CHIP	22K	5%	1/10W
R743	1-216-230-00	RES-CHIP	22K	2%	1/8W (DA4ES/DA7ES)
R743	1-260-012-11	CARBON MELF	22K	2%	1/8W (VA333ES)
R751	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R751	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R752	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R752	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R753	1-249-494-11	CARBON	68K	5%	1/2W
R754	1-249-683-31	CARBON	2.7K	5%	1/2W
R759	1-216-025-11	RES-CHIP	100	5%	1/10W
R761	1-216-085-11	RES-CHIP	33K	5%	1/10W
R762	1-216-073-00	RES-CHIP	10K	5%	1/10W
R763	1-216-077-11	RES-CHIP	15K	5%	1/10W
R764	1-216-081-00	METAL CHIP	22K	5%	1/10W
R765	1-216-081-00	METAL CHIP	22K	5%	1/10W

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Part No.	Description
A-4728-908-A	AC BOARD, COMPLETE (AEP)
A-4728-949-A	AC BOARD, COMPLETE (DA4ES/DA7ES)
A-4728-966-A	AC BOARD, COMPLETE (KR)
A-4728-985-A	AC BOARD, COMPLETE (TW)

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Part No.	Description
1-533-399-31	HOLDER, FUSE

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C901	1-113-925-11	CERAMIC	0.01uF	20%	250V (AEP,KR)
C902	1-128-547-11	ELECT	6800uF	20%	16V
C903	1-126-943-11	ELECT	2200uF	20%	25V
C904	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C905	1-126-960-11	ELECT	1uF	20%	50V
C906	1-130-472-00	MYLAR	0.0012uF	5%	50V (AEP,KR)
C906	1-137-432-11	MYLAR	820PF	5%	50V (EXCEPT AEP,KR)
C907	1-137-150-11	MYLAR	0.01uF	5%	50V (EXCEPT AEP,KR)
C907	1-137-350-11	MYLAR	0.015uF	5%	50V (AEP,KR)

< CONNECTOR >

Ref. No.	Part No.	Description
CNP901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P (KR)
* CNP902	1-565-792-11	PIN, CONNECTOR (3.96mm PITCH) 2P
CNP908	1-779-978-11	PIN, CONNECTOR 3P
* CNP911	1-564-321-21	PIN, CONNECTOR (3.96mm PITCH) 2P

< AC INLET >

Ref. No.	Part No.	Description
CNP904	1-816-148-11	INLET, AC (∼ AC IN) (EXCEPT KR)

< DIODE >

Ref. No.	Part No.	Description	
D901	8-719-085-36	DIODE	11EQS04-TB5
D902	8-719-085-36	DIODE	11EQS04-TB5
D903	8-719-085-36	DIODE	11EQS04-TB5
D904	8-719-085-36	DIODE	11EQS04-TB5
D905	8-719-988-61	DIODE	1SS355TE-17
D906	8-719-988-61	DIODE	1SS355TE-17
D907	8-719-988-61	DIODE	1SS355TE-17
D908	8-719-053-18	DIODE	1SR154-400TE-25

< TERMINAL >

Ref. No.	Part No.	Description
* EP901	1-537-738-21	TERMINAL, EARTH

< AC OUTLET >

Ref. No.	Part No.	Description
⚠J901	1-251-718-11	OUTLET (2 GANG), AC (AC OUTLET) (EXCEPT AEP,KR)
⚠J901	1-785-285-11	OUTLET, AC (1P) (AC OUTLET) (AEP)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

AC AMP

Ref. No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q901	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q902	8-729-027-43	TRANSISTOR	DTC114EKA-T146			
Q903	8-729-027-43	TRANSISTOR	DTC114EKA-T146			
Q904	8-729-140-93	TRANSISTOR	2SB733-34			
		< RESISTOR >				
⚠R901	1-219-237-11	SOLID	3.3M	20%	1/2W F	(DA4ES/DA7ES)
R902	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R903	1-216-065-11	RES-CHIP	4.7K	5%	1/10W	
R904	1-216-093-11	RES-CHIP	68K	5%	1/10W	
R905	1-216-085-11	RES-CHIP	33K	5%	1/10W	
R906	1-216-049-11	RES-CHIP	1K	5%	1/10W	(AEP)
R906	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	(EXCEPT AEP,KR)
R907	1-216-097-11	RES-CHIP	100K	5%	1/10W	
R908	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R909	1-216-085-11	RES-CHIP	33K	5%	1/10W	
R910	1-216-073-00	RES-CHIP	10K	5%	1/10W	
		< RELAY >				
⚠RY901	1-755-388-11	RELAY (AC POWER) (DA4ES/DA7ES)				
⚠RY901	1-755-393-11	RELAY, POWER (VA333ES)				
		< TRANSFORMER >				
⚠T902	1-435-162-21	TRANSFORMER, POWER (DA4ES/DA7ES)				
⚠T902	1-435-163-21	TRANSFORMER, POWER (AEP,KR)				
⚠T902	1-437-477-12	TRANSFORMER, POWER (TW)				

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Ref. No.	Part No.	Description				Remark
	A-4728-907-A	AMP BOARD, COMPLETE (VA333ES)				
	A-4728-947-A	AMP BOARD, COMPLETE (DA4ES/DA7ES)				
		********************				
		< CAPACITOR >				
C500	1-119-850-11	ELECT	10uF	20%	63V	(VA333ES)
C500	1-128-868-11	ELECT	10uF	20%	63V	(DA4ES/DA7ES)
C501	1-119-825-41	ELECT	22uF	20%	50V	
C502	1-137-505-11	MYLAR	220PF	5%	50V	
C503	1-102-233-00	CERAMIC	33PF	10%	500V	
C504	1-102-230-00	CERAMIC	4PF	0.25PF	500V	
C505	1-119-779-11	ELECT	220uF	20%	10V	
C507	1-128-879-11	ELECT	2.2uF	20%	100V	
C520	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C520	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C523	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C524	1-137-372-11	MYLAR	0.022uF	5%	50V	
C539	1-137-503-11	MYLAR	0.0001uF	5%	50V	
C541	1-128-858-11	ELECT	22uF	20%	50V	
C542	1-128-834-11	ELECT	470uF	20%	10V	
C551	1-119-825-41	ELECT	22uF	20%	50V	
C552	1-137-505-11	MYLAR	220PF	5%	50V	
C553	1-102-233-00	CERAMIC	33PF	10%	500V	
C554	1-102-230-00	CERAMIC	4PF	0.25PF	500V	
C555	1-119-779-11	ELECT	220uF	20%	10V	
C570	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C570	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C573	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C574	1-137-372-11	MYLAR	0.022uF	5%	50V	
C589	1-137-503-11	MYLAR	0.0001uF	5%	50V	
C593	1-126-077-11	ELECT	100uF	20%	100V	
C594	1-126-077-11	ELECT	100uF	20%	100V	
C595	1-128-883-11	ELECT	22uF	20%	100V	
C596	1-128-883-11	ELECT	22uF	20%	100V	
C597	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C600	1-119-850-11	ELECT	10uF	20%	63V	(VA333ES)
C600	1-128-868-11	ELECT	10uF	20%	63V	(DA4ES/DA7ES)
C608	1-130-777-00	MYLAR	0.1uF	10%	100V	
C609	1-130-777-00	MYLAR	0.1uF	10%	100V	
C620	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C620	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C623	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C624	1-137-372-11	MYLAR	0.022uF	5%	50V	
C670	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C670	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C673	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C674	1-137-372-11	MYLAR	0.022uF	5%	50V	
C681	1-119-825-41	ELECT	22uF	20%	50V	
C682	1-137-505-11	MYLAR	220PF	5%	50V	
C683	1-119-779-11	ELECT	220uF	20%	10V	
C684	1-102-230-00	CERAMIC	4PF	0.25PF	500V	
C685	1-102-233-00	CERAMIC	33PF	10%	500V	
C687	1-137-503-11	MYLAR	0.0001uF	5%	50V	
C691	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C691	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C692	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C693	1-137-372-11	MYLAR	0.022uF	5%	50V	
C720	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C720	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C723	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C724	1-137-372-11	MYLAR	0.022uF	5%	50V	
C770	1-119-827-11	ELECT	47uF	20%	50V	(VA333ES)
C770	1-128-860-11	ELECT	47uF	20%	50V	(DA4ES/DA7ES)
C773	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C774	1-137-372-11	MYLAR	0.022uF	5%	50V	
		< CONNECTOR >				
CN504	1-785-102-11	PIN, CONNECTOR (3.96mm PITCH) 4P				
CNP501	1-779-977-11	PIN, CONNECTOR 6P				

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Ref. No.	Part No.	Description	Remark
CNP503	1-785-104-11	PIN, CONNECTOR (3.96mm PITCH) 6P	
CNP504	1-784-923-11	PIN, CONNECTOR 7P	
CNP505	1-785-102-21	PIN, CONNECTOR (3.96mm PITCH) 4P	
CNP509	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
CNP602	1-779-978-21	PIN, CONNECTOR 3P	
CNP606	1-770-379-11	CONNECTOR, BOARD TO BOARD 6P	
CNP608	1-770-382-11	CONNECTOR, BOARD TO BOARD 12P	
CNP702	1-785-103-11	PIN, CONNECTOR (3.96mm PITCH) 5P	
		< DIODE >	
D501	8-719-988-61	DIODE 1SS355TE-17	
D502	8-719-036-66	DIODE RD2.2SB-T1	
D503	8-719-036-66	DIODE RD2.2SB-T1	
D504	8-719-988-61	DIODE 1SS355TE-17	
D505	8-719-988-61	DIODE 1SS355TE-17	
D547	8-719-988-61	DIODE 1SS355TE-17	
D548	8-719-988-61	DIODE 1SS355TE-17	
D549	8-719-988-61	DIODE 1SS355TE-17	
D551	8-719-988-61	DIODE 1SS355TE-17	
D552	8-719-036-66	DIODE RD2.2SB-T1	
D553	8-719-036-66	DIODE RD2.2SB-T1	
D554	8-719-988-61	DIODE 1SS355TE-17	
D555	8-719-988-61	DIODE 1SS355TE-17	
D591	8-719-083-61	DIODE UDZS-TE-17-11B (US, CND)	
D591	8-719-083-63	DIODE UDZS-TE-17-13B (EXCEPT US, CND)	
D592	8-719-083-82	DIODE UDZS-TE-17-12B (EXCEPT US, CND)	
D592	8-719-977-28	DIODE UDZS-TE-17-10B (US, CND)	
D593	8-719-988-61	DIODE 1SS355TE-17	
D594	8-719-988-61	DIODE 1SS355TE-17	
D599	8-719-988-61	DIODE 1SS355TE-17	
D601	8-719-988-61	DIODE 1SS355TE-17	
D602	8-719-036-66	DIODE RD2.2SB-T1	
D603	8-719-036-66	DIODE RD2.2SB-T1	
D604	8-719-988-61	DIODE 1SS355TE-17	
D605	8-719-988-61	DIODE 1SS355TE-17	
D651	8-719-988-61	DIODE 1SS355TE-17	
D652	8-719-036-66	DIODE RD2.2SB-T1	
D653	8-719-036-66	DIODE RD2.2SB-T1	
D654	8-719-988-61	DIODE 1SS355TE-17	
D655	8-719-988-61	DIODE 1SS355TE-17	
D671	8-719-988-61	DIODE 1SS355TE-17	
D672	8-719-036-66	DIODE RD2.2SB-T1	
D673	8-719-036-66	DIODE RD2.2SB-T1	
D674	8-719-988-61	DIODE 1SS355TE-17	
D675	8-719-988-61	DIODE 1SS355TE-17	
D701	8-719-988-61	DIODE 1SS355TE-17	
D702	8-719-036-66	DIODE RD2.2SB-T1	
D703	8-719-036-66	DIODE RD2.2SB-T1	
D704	8-719-988-61	DIODE 1SS355TE-17	
D705	8-719-988-61	DIODE 1SS355TE-17	
D751	8-719-988-61	DIODE 1SS355TE-17	
D752	8-719-036-66	DIODE RD2.2SB-T1	
D753	8-719-036-66	DIODE RD2.2SB-T1	
D754	8-719-988-61	DIODE 1SS355TE-17	
D755	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC501	6-700-943-01	IC uPC2581V-S	
IC651	6-700-943-01	IC uPC2581V-S	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q501	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q503	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q508	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q509	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q547	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q548	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q549	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q558	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q559	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q591	8-729-021-82	TRANSISTOR 2SD2396K	
Q592	8-729-024-93	TRANSISTOR 2SB1565E	
Q593	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q599	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q608	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q609	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q651	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q652	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q658	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q659	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q708	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q709	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q758	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q759	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
		< RESISTOR >	
R501	1-208-782-11	RES-CHIP 1K 2% 1/8W	(DA4ES/DA7ES)
R501	1-259-995-11	CARBON MELF 1K 2% 1/8W	(VA333ES)
R502	1-208-571-11	RES-CHIP 68K 2% 1/8W	(DA4ES/DA7ES)
R502	1-260-018-11	CARBON MELF 68K 2% 1/8W	(VA333ES)
R503	1-249-494-11	CARBON 68K 5% 1/2W	
R504	1-249-683-31	CARBON 2.7K 5% 1/2W	
R505	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R509	1-216-025-11	RES-CHIP 100 5% 1/10W	
R510	1-215-868-00	METAL OXIDE 680 5% 1W	
R521	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R522	1-216-077-11	RES-CHIP 15K 5% 1/10W	
R523	1-216-093-11	RES-CHIP 68K 5% 1/10W	
R524	1-249-393-11	CARBON 10 5% 1/4W	
R525	1-249-393-11	CARBON 10 5% 1/4W	
R526	1-208-401-11	RES-CHIP 33 2% 1/8W	(DA4ES/DA7ES)
R526	1-259-977-11	CARBON MELF 33 2% 1/8W	(VA333ES)
R527	1-240-855-11	CARBON 6.2K 5% 1/4W	
R528	1-216-214-00	RES-CHIP 4.7K 2% 1/8W	(DA4ES/DA7ES)
R528	1-260-004-11	CARBON MELF 4.7K 2% 1/8W	(VA333ES)
R529	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R530	1-249-393-11	CARBON 10 5% 1/4W	
R539	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R540	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R541	1-216-689-11	METAL CHIP 39K 0.5% 1/10W	
R542	1-216-073-00	RES-CHIP 10K 5% 1/10W	

AMP

Ref. No.	Part No.	Description			Remark
R543	1-216-230-00	RES-CHIP	22K	2%	1/8W (DA4ES/DA7ES)
R543	1-260-012-11	CARBON MELF	22K	2%	1/8W (VA333ES)
R551	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R551	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R552	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R552	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R553	1-249-494-11	CARBON	68K	5%	1/2W
R554	1-249-683-31	CARBON	2.7K	5%	1/2W
R559	1-216-025-11	RES-CHIP	100	5%	1/10W
R560	1-215-868-00	METAL OXIDE	680	5%	1W
R571	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R572	1-216-077-11	RES-CHIP	15K	5%	1/10W
R573	1-216-093-11	RES-CHIP	68K	5%	1/10W
R574	1-249-393-11	CARBON	10	5%	1/4W
R575	1-249-393-11	CARBON	10	5%	1/4W
R576	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R576	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R577	1-240-855-11	CARBON	6.2K	5%	1/4W
R578	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R578	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R579	1-216-089-11	RES-CHIP	47K	5%	1/10W
R580	1-249-393-11	CARBON	10	5%	1/4W
R587	1-249-393-11	CARBON	10	5%	1/4W
R588	1-216-073-00	RES-CHIP	10K	5%	1/10W
R591	1-249-393-11	CARBON	10	5%	1/4W
R592	1-249-393-11	CARBON	10	5%	1/4W
R594	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R595	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R596	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R597	1-216-041-00	METAL CHIP	470	5%	1/10W
R598	1-216-041-00	METAL CHIP	470	5%	1/10W
R621	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R622	1-216-077-11	RES-CHIP	15K	5%	1/10W
R623	1-216-093-11	RES-CHIP	68K	5%	1/10W
R624	1-249-393-11	CARBON	10	5%	1/4W
R625	1-249-393-11	CARBON	10	5%	1/4W
R626	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R626	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R627	1-240-855-11	CARBON	6.2K	5%	1/4W
R628	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R628	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R629	1-216-089-11	RES-CHIP	47K	5%	1/10W
R630	1-249-393-11	CARBON	10	5%	1/4W
R660	1-216-230-00	RES-CHIP	22K	2%	1/8W (DA4ES/DA7ES)
R660	1-260-012-11	CARBON MELF	22K	2%	1/8W (VA333ES)
R661	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R661	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R662	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R662	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R663	1-249-494-11	CARBON	68K	5%	1/2W
R664	1-249-683-31	CARBON	2.7K	5%	1/2W
R665	1-216-025-11	RES-CHIP	100	5%	1/10W
R671	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R672	1-216-077-11	RES-CHIP	15K	5%	1/10W
R673	1-216-093-11	RES-CHIP	68K	5%	1/10W
R674	1-249-393-11	CARBON	10	5%	1/4W
R675	1-249-393-11	CARBON	10	5%	1/4W
R676	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R676	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R677	1-240-855-11	CARBON	6.2K	5%	1/4W
R678	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R678	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R679	1-216-089-11	RES-CHIP	47K	5%	1/10W
R680	1-249-393-11	CARBON	10	5%	1/4W
R688	1-249-393-11	CARBON	10	5%	1/4W
R689	1-249-393-11	CARBON	10	5%	1/4W
R690	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R690	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R691	1-240-855-11	CARBON	6.2K	5%	1/4W
R692	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R692	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R693	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R694	1-216-093-11	RES-CHIP	68K	5%	1/10W
R695	1-216-077-11	RES-CHIP	15K	5%	1/10W
R696	1-249-393-11	CARBON	10	5%	1/4W
R697	1-216-089-11	RES-CHIP	47K	5%	1/10W
R721	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R722	1-216-077-11	RES-CHIP	15K	5%	1/10W
R723	1-216-093-11	RES-CHIP	68K	5%	1/10W
R724	1-249-393-11	CARBON	10	5%	1/4W
R725	1-249-393-11	CARBON	10	5%	1/4W
R726	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R726	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R727	1-240-855-11	CARBON	6.2K	5%	1/4W
R728	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R728	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R729	1-216-089-11	RES-CHIP	47K	5%	1/10W
R730	1-249-393-11	CARBON	10	5%	1/4W
R771	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R772	1-216-077-11	RES-CHIP	15K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R773	1-216-093-11	RES-CHIP	68K	5%	1/10W
R774	1-249-393-11	CARBON	10	5%	1/4W
R775	1-249-393-11	CARBON	10	5%	1/4W
R776	1-208-401-11	RES-CHIP	33	2%	1/8W (DA4ES/DA7ES)
R776	1-259-977-11	CARBON MELF	33	2%	1/8W (VA333ES)
R777	1-240-855-11	CARBON	6.2K	5%	1/4W
R778	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA4ES/DA7ES)
R778	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R779	1-216-089-11	RES-CHIP	47K	5%	1/10W
R780	1-249-393-11	CARBON	10	5%	1/4W
		< VARIABLE RESISTOR >			
RV501	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV551	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV601	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV651	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV652	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV701	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV751	1-238-598-11	RES, ADJ, CARBON 2.2K			
		< RELAY >			
RY504	1-515-793-11	RELAY			
		< CONNECTOR >			
* TP501	1-560-060-00	PIN, CONNECTOR 2P			
* TP551	1-560-060-00	PIN, CONNECTOR 2P			
* TP601	1-560-060-00	PIN, CONNECTOR 2P			
* TP651	1-560-060-00	PIN, CONNECTOR 2P			
* TP652	1-564-505-11	PLUG, CONNECTOR 2P			
* TP701	1-560-060-00	PIN, CONNECTOR 2P			
* TP751	1-560-060-00	PIN, CONNECTOR 2P			

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A-4728-909-A C-VIDEO BOARD, COMPLETE (AEP)
A-4728-951-A C-VIDEO BOARD, COMPLETE (DA4ES/DA7ES)
A-4729-682-A C-VIDEO BOARD, COMPLETE (TW,KR)

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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C201	1-119-824-11	ELECT	10uF	20%	50V
C202	1-119-824-11	ELECT	10uF	20%	50V
C203	1-119-824-11	ELECT	10uF	20%	50V
C204	1-119-824-11	ELECT	10uF	20%	50V
C206	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C207	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C208	1-119-824-11	ELECT	10uF	20%	50V
C209	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C210	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C211	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C212	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C213	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C214	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C238	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C240	1-163-038-00	CERAMIC CHIP	0.1uF		25V (DA4ES/DA7ES)
C253	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C255	1-128-834-11	ELECT	470uF	20%	10V
C278	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C280	1-119-824-11	ELECT	10uF	20%	50V (DA4ES/DA7ES)
C281	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (DA4ES/DA7ES)
C282	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (DA4ES/DA7ES)
C283	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C284	1-119-824-11	ELECT	10uF	20%	50V (DA4ES/DA7ES)
C285	1-119-824-11	ELECT	10uF	20%	50V (DA4ES/DA7ES)
C286	1-119-824-11	ELECT	10uF	20%	50V (DA4ES/DA7ES)
C287	1-119-824-11	ELECT	10uF	20%	50V (DA4ES/DA7ES)
C288	1-163-243-11	CERAMIC CHIP	47PF	5%	50V (DA4ES/DA7ES)
C289	1-163-243-11	CERAMIC CHIP	47PF	5%	50V (DA4ES/DA7ES)
C290	1-128-834-11	ELECT	470uF	20%	10V
C291	1-119-824-11	ELECT	10uF	20%	50V
C292	1-119-824-11	ELECT	10uF	20%	50V
C293	1-119-824-11	ELECT	10uF	20%	50V
C294	1-119-824-11	ELECT	10uF	20%	50V
C295	1-119-824-11	ELECT	10uF	20%	50V
C296	1-119-824-11	ELECT	10uF	20%	50V
C297	1-164-690-11	CERAMIC CHIP	0.0022uF	5%	50V
C298	1-128-834-11	ELECT	470uF	20%	10V
C299	1-128-834-11	ELECT	470uF	20%	10V
C2003	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2005	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2009	1-164-690-11	CERAMIC CHIP	0.0022uF	5%	50V
C2014	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C2015	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C2019	1-128-830-11	ELECT	47uF	20%	10V (DA4ES/DA7ES)
C2020	1-128-830-11	ELECT	47uF	20%	10V (DA4ES/DA7ES)
C2021	1-128-830-11	ELECT	47uF	20%	10V
C2022	1-128-830-11	ELECT	47uF	20%	10V
		< CONNECTOR >			
CNS200	1-784-774-11	CONNECTOR, FFC 13P			
CNS205	1-784-774-11	CONNECTOR, FFC 13P			
		< DIODE >			
D202	8-719-801-78	DIODE 1SS184 (DA4ES/DA7ES)			
		< FERRITE BEAD >			
FB201	1-216-296-11	SHORT CHIP	0		
		< IC >			
IC201	8-759-536-24	IC NJM2296M-TE2			

C-VIDEO

CIS

Ref. No.	Part No.	Description	Remark
IC211	8-759-536-24	IC NJM2296M-TE2 (DA4ES/DA7ES)	
IC212	6-701-891-01	IC NJM2581D	
IC214	8-759-671-94	IC MC74HC4053AFEL	
		< JACK >	
J200	1-794-435-11	JACK, PIN 2P (MONITOR,TV/SAT)	
J201	1-770-337-21	JACK, PIN 3P (DVD/LD,VIDEO 2)	
J202	1-770-337-21	JACK, PIN 3P (VIDEO 1,2ND ROOM)	(DA4ES/DA7ES)
J202	1-794-435-11	JACK, PIN 2P (VIDEO 1) (VA333ES)	
J212	1-794-313-11	JACK, PIN (BLOCK) 9P (COMPONENT VIDEO)	
		< JUMPER RESISTOR >	
JR260	1-216-296-11	SHORT CHIP 0	
JR261	1-216-296-11	SHORT CHIP 0	
JR263	1-216-296-11	SHORT CHIP 0	
JW284	1-216-296-11	SHORT CHIP 0	(DA4ES/DA7ES)
		< COIL >	
L206	1-410-482-31	INDUCTOR 100uH (DA4ES/DA7ES)	
L207	1-410-482-31	INDUCTOR 100uH (DA4ES/DA7ES)	
L208	1-410-482-31	INDUCTOR 100uH	
L209	1-410-482-31	INDUCTOR 100uH	
		< TRANSISTOR >	
Q207	8-729-027-43	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R201	1-216-022-00	METAL CHIP 75 5% 1/10W	
R202	1-216-022-00	METAL CHIP 75 5% 1/10W	
R203	1-216-022-00	METAL CHIP 75 5% 1/10W	
R204	1-216-022-00	METAL CHIP 75 5% 1/10W	
R205	1-216-022-00	METAL CHIP 75 5% 1/10W	
R206	1-216-022-00	METAL CHIP 75 5% 1/10W	
R207	1-216-022-00	METAL CHIP 75 5% 1/10W	
R234	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R240	1-216-097-11	RES-CHIP 100K 5% 1/10W	(DA4ES/DA7ES)
R253	1-216-022-00	METAL CHIP 75 5% 1/10W	(DA4ES/DA7ES)
R256	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R257	1-216-022-00	METAL CHIP 75 5% 1/10W	
R258	1-216-022-00	METAL CHIP 75 5% 1/10W	
R259	1-216-022-00	METAL CHIP 75 5% 1/10W	
R260	1-216-022-00	METAL CHIP 75 5% 1/10W	
R261	1-216-022-00	METAL CHIP 75 5% 1/10W	
R262	1-216-022-00	METAL CHIP 75 5% 1/10W	
R263	1-216-022-00	METAL CHIP 75 5% 1/10W	
R264	1-216-022-00	METAL CHIP 75 5% 1/10W	
R265	1-216-022-00	METAL CHIP 75 5% 1/10W	
R266	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R267	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R268	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R271	1-216-022-00	METAL CHIP 75 5% 1/10W	(DA4ES/DA7ES)
R275	1-216-022-00	METAL CHIP 75 5% 1/10W	(DA4ES/DA7ES)
R280	1-216-022-00	METAL CHIP 75 5% 1/10W	
R291	1-216-295-11	SHORT CHIP 0	
R292	1-216-295-11	SHORT CHIP 0	
R293	1-216-295-11	SHORT CHIP 0	

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Ref. No.	Part No.	Description	Remark
	A-4728-882-A	CIS BOARD, COMPLETE (DA4ES)	
	A-4728-921-A	CIS BOARD, COMPLETE (DA7ES)	
		*******************	
		< CAPACITOR >	
C51	1-126-960-11	ELECT 1uF 20% 50V	(DA4ES/DA7ES)
C52	1-126-960-11	ELECT 1uF 20% 50V	(DA4ES/DA7ES)
C53	1-126-960-11	ELECT 1uF 20% 50V	(DA7ES)
C61	1-126-947-11	ELECT 47uF 20% 16V	(DA4ES/DA7ES)
C62	1-165-319-11	CERAMIC CHIP 0.1uF 50V	(DA4ES/DA7ES)
C63	1-126-961-11	ELECT 2.2uF 20% 50V	(DA4ES/DA7ES)
C65	1-126-767-11	ELECT 1000uF 20% 16V	(DA4ES/DA7ES)
C66	1-126-767-11	ELECT 1000uF 20% 16V	(DA4ES/DA7ES)
C67	1-126-767-11	ELECT 1000uF 20% 16V	(DA7ES)
		< CONNECTOR >	
CNP52	1-784-923-11	PIN, CONNECTOR 7P (DA4ES/DA7ES)	
		< DIODE >	
D60	8-719-988-61	DIODE 1SS355TE-17	
D61	8-719-075-86	LED SID307BR-TP19	
D63	1-216-296-11	SHORT CHIP 0	
D64	1-216-296-11	SHORT CHIP 0	
D65	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC61	8-759-459-85	IC NJL63H400A (DA4ES/DA7ES)	
IC63	8-759-564-49	IC TC7W53FU(TE12R) (DA4ES/DA7ES)	
		< JACK >	
J51	1-563-330-11	JACK (TRIGGER MAIN ROOM) (DA4ES/DA7ES)	
J52	1-563-330-11	JACK (TRIGGER 2ND ROOM) (DA4ES/DA7ES)	
J53	1-563-330-11	JACK (TRIGGER 3RD ROOM) (DA7ES)	
J54	1-563-330-11	JACK (IR IN) (DA4ES/DA7ES)	
J55	1-563-330-11	JACK (IR OUT 1) (DA4ES/DA7ES)	
J56	1-563-330-11	JACK (IR OUT 2) (DA4ES/DA7ES)	
		< TRANSISTOR >	
Q51	8-729-140-97	TRANSISTOR 2SB734-34 (DA4ES/DA7ES)	
Q52	8-729-027-43	TRANSISTOR DTC114EKA-T146	(DA4ES/DA7ES)
Q53	8-729-140-97	TRANSISTOR 2SB734-34 (DA4ES/DA7ES)	
Q54	8-729-027-43	TRANSISTOR DTC114EKA-T146	(DA4ES/DA7ES)
Q55	8-729-140-97	TRANSISTOR 2SB734-34 (DA7ES)	
Q56	8-729-027-43	TRANSISTOR DTC114EKA-T146 (DA7ES)	

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R51	1-801-726-11	THERMISTOR, POSITIVE (DA4ES/DA7ES)	
R52	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R53	1-216-057-00	METAL CHIP 2.2K 5%	1/10W (DA4ES/DA7ES)
R54	1-801-726-11	THERMISTOR, POSITIVE (DA4ES/DA7ES)	
R55	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R56	1-216-057-00	METAL CHIP 2.2K 5%	1/10W (DA4ES/DA7ES)
R57	1-801-726-11	THERMISTOR, POSITIVE (DA7ES)	
R58	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA7ES)
R59	1-216-057-00	METAL CHIP 2.2K 5%	1/10W (DA7ES)
R60	1-216-025-11	RES-CHIP 100 5%	1/10W (DA4ES/DA7ES)
R61	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R62	1-216-097-11	RES-CHIP 100K 5%	1/10W (DA4ES/DA7ES)
R63	1-216-025-11	RES-CHIP 100 5%	1/10W (DA4ES/DA7ES)
R64	1-216-025-11	RES-CHIP 100 5%	1/10W (DA4ES/DA7ES)
R65	1-216-025-11	RES-CHIP 100 5%	1/10W (DA4ES/DA7ES)
R66	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R67	1-216-025-11	RES-CHIP 100 5%	1/10W (DA4ES/DA7ES)
R68	1-216-001-00	METAL CHIP 10 5%	1/10W (DA4ES/DA7ES)
R69	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R70	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA4ES/DA7ES)
R71	1-216-073-00	RES-CHIP 10K 5%	1/10W (DA7ES)
R72	1-216-097-11	RES-CHIP 100K 5%	1/10W (DA4ES/DA7ES)

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A-4729-692-A CIS POWER BOARD, COMPLETE (DA4ES/DA7ES)

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Ref. No.	Part No.	Description	Remark
		< CAPACITOR >	
C825	1-126-943-11	ELECT 2200uF 20%	25V (DA4ES/DA7ES)
C826	1-126-942-61	ELECT 1000uF 20%	25V (DA4ES/DA7ES)
C827	1-126-768-11	ELECT 2200uF 20%	16V (DA4ES/DA7ES)
C828	1-126-943-11	ELECT 2200uF 20%	25V (DA4ES/DA7ES)
C829	1-126-942-61	ELECT 1000uF 20%	25V (DA4ES/DA7ES)
C830	1-126-768-11	ELECT 2200uF 20%	16V (DA4ES/DA7ES)
C831	1-126-943-11	ELECT 2200uF 20%	25V (DA7ES)
C832	1-126-942-61	ELECT 1000uF 20%	25V (DA7ES)
C833	1-126-768-11	ELECT 2200uF 20%	16V (DA7ES)
		< CONNECTOR >	
* CN810	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	(DA4ES/DA7ES)
CNP809	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	(DA4ES/DA7ES)
		< DIODE >	
D821	8-719-080-70	DIODE 11EQS04N-TB5 (DA4ES/DA7ES)	
D822	8-719-080-70	DIODE 11EQS04N-TB5 (DA4ES/DA7ES)	
D823	8-719-080-70	DIODE 11EQS04N-TB5 (DA4ES/DA7ES)	
D824	8-719-080-70	DIODE 11EQS04N-TB5 (DA4ES/DA7ES)	
D825	8-719-080-70	DIODE 11EQS04N-TB5 (DA7ES)	
D826	8-719-080-70	DIODE 11EQS04N-TB5 (DA7ES)	
		< IC >	
IC801	8-759-231-58	IC TA7812S (DA4ES/DA7ES)	
IC802	8-759-231-58	IC TA7812S (DA4ES/DA7ES)	
IC803	8-759-231-58	IC TA7812S (DA7ES)	

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A-4728-895-A CLOCK BOARD, COMPLETE (AEP)

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Ref. No.	Part No.	Description	Remark
		< CAPACITOR >	
C256	1-163-235-11	CERAMIC CHIP 22PF 5%	50V (AEP)
C257	1-163-091-00	CERAMIC CHIP 8PF	50V (AEP)
C258	1-163-091-00	CERAMIC CHIP 8PF	50V (AEP)
C259	1-163-235-11	CERAMIC CHIP 22PF 5%	50V (AEP)
C260	1-165-319-11	CERAMIC CHIP 0.1uF	50V (AEP)
C261	1-128-840-11	ELECT 47uF 20%	16V (AEP)
C2010	1-165-319-11	CERAMIC CHIP 0.1uF	50V (AEP)
		< CONNECTOR >	
CNS202	1-770-593-41	CONNECTOR, BOARD TO BOARD 5P (AEP)	
		< TRIMMER >	
CT201	1-141-442-91	CAP, CERAMIC TRIMMER 20PF (AEP)	
CT202	1-141-442-91	CAP, CERAMIC TRIMMER 20PF (AEP)	
		< FERRITE BEAD >	
FB203	1-414-813-11	FERRITE, EMI (SMD) (AEP)	
		< IC >	
IC207	8-759-242-70	IC TC7WU04F (AEP)	
IC208	8-759-032-01	IC MC74HC00AF (AEP)	

CLOCK DC DIGITAL

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R242	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP)
R243	1-216-035-00	METAL CHIP	270	5%	1/10W (AEP)
R244	1-216-035-00	METAL CHIP	270	5%	1/10W (AEP)
R269	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP)
R270	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP)
R276	1-216-121-11	RES-CHIP	1M	5%	1/10W (AEP)
R277	1-216-121-11	RES-CHIP	1M	5%	1/10W (AEP)
		< VIBRATOR >			
X200	1-781-820-21	VIBRATOR, CRYSTAL (17.734MHz) (AEP)			
X201	1-781-821-21	VIBRATOR, CRYSTAL (14.31MHz) (AEP)			

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Ref. No.	Part No.	Description			Remark
	A-4728-899-A	DC BOARD, COMPLETE (VA333ES)			
	A-4728-927-A	DC BOARD, COMPLETE (DA4ES/DA7ES)			
		*******************			
	1-533-399-31	HOLDER, FUSE			
		< CAPACITOR >			
⚠C801	1-106-375-12	MYLAR	0.022uF		200V (DA4ES/DA7ES)
⚠C801	1-115-684-21	MYLAR	0.0047uF	5%	100V (VA333ES)
⚠C802	1-106-375-12	MYLAR	0.022uF		200V (DA4ES/DA7ES)
⚠C802	1-115-684-21	MYLAR	0.0047uF	5%	100V (VA333ES)
⚠C803	1-137-666-12	ELECT	15000uF	20%	71V
⚠C804	1-137-666-12	ELECT	15000uF	20%	71V
C805	1-128-860-11	ELECT	47uF	20%	50V
C808	1-127-732-51	ELECT	2200uF	20%	35V
C809	1-127-732-51	ELECT	2200uF	20%	35V
C812	1-128-860-11	ELECT	47uF	20%	50V
⚠C815	1-128-873-11	ELECT	220uF	20%	63V
C816	1-128-860-11	ELECT	47uF	20%	50V
⚠C822	1-106-377-00	MYLAR	0.027uF	200V	
C823	1-126-939-11	ELECT	10000uF	20%	16V
C824	1-127-727-11	ELECT	1000uF	20%	16V
		< CONNECTOR >			
* CN801	1-564-104-00	PIN, CONNECTOR (3.96mm PITCH) 3P			
CNP801	1-784-926-11	PIN, CONNECTOR 11P			
CNP802	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
CNP803	1-785-102-21	PIN, CONNECTOR (3.96mm PITCH) 4P			
CNP804	1-691-769-11	PLUG (MICRO CONNECTOR) 7P			
		< DIODE >			
D801	6-500-347-01	DIODE	S15VB20		
D803	8-719-083-89	DIODE	11ES2N-TB5		
D804	8-719-083-89	DIODE	11ES2N-TB5		
D805	8-719-083-89	DIODE	11ES2N-TB5		
D806	8-719-083-89	DIODE	11ES2N-TB5		
D807	8-719-510-53	DIODE	D4SB60L		
D811	8-719-057-00	DIODE	UDZ-TE-17-36B		
D812	8-719-083-89	DIODE	11ES2N-TB5		
D813	8-719-083-89	DIODE	11ES2N-TB5		
D814	8-719-056-77	DIODE	UDZ-TE-17-3.9B (VA333ES)		
D816	8-719-070-30	DIODE	PTZ-TE25-5.6A		
		< JUMPER RESISTOR >			
JR801	1-216-295-11	SHORT CHIP	0		(DA4ES/DA7ES)
		< TRANSISTOR >			
Q801	8-729-140-96	TRANSISTOR	2SD774-34		

Ref. No.	Part No.	Description				Remark
		< RESISTOR >				
R801	1-216-061-11	RES-CHIP	3.3K	5%	1/10W	
R802	1-249-401-11	CARBON	47	5%	1/4W	
R803	1-216-081-00	METAL CHIP	22K	5%	1/10W	
⚠R804	1-216-349-00	METAL OXIDE	1	5%	1W	F
⚠R805	1-216-349-00	METAL OXIDE	1	5%	1W	F
⚠R806	1-216-349-00	METAL OXIDE	1	5%	1W	F
⚠R807	1-216-349-00	METAL OXIDE	1	5%	1W	F
R808	1-249-416-11	CARBON	820	5%	1/4W	

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Ref. No.	Part No.	Description				Remark
	A-4728-884-A	DIGITAL BOARD, COMPLETE (DA4ES)				
	A-4728-897-A	DIGITAL BOARD, COMPLETE (AEP)				
	A-4728-923-A	DIGITAL BOARD, COMPLETE (DA7ES)				
	A-4728-962-A	DIGITAL BOARD, COMPLETE (TW,KR)				
		***********************				
*	3-309-144-21	HEAT SINK				
	4-242-610-11	HEAT SINK (10) (DA4ES/DA7ES)				
	4-974-510-11	SCREW (+BV 3X8 CU)				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3 (DA4ES)				
		< CAPACITOR >				
C1101	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C1102	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1103	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C1104	1-119-834-11	ELECT	22uF	20%	63V	(AEP
C1104	1-128-858-11	ELECT	22uF	20%	25V	(EXCEPT AEP
C1105	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1106	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1107	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	
C1108	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	
C1109	1-119-799-11	ELECT	47uF	20%	16V	(AEP
C1109	1-128-840-11	ELECT	47uF	20%	16V	(EXCEPT AEP
C1110	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1111	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1112	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1113	1-119-791-31	ELECT	330uF	20%	16V	(AEP
C1113	1-128-846-11	ELECT	330uF	20%	16V	(EXCEPT AEP
C1114	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
C1115	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	
C1116	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V	
C1117	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
C1118	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1119	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1120	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1121	1-119-822-11	ELECT	3.3uF	20%	50V
C1122	1-119-779-11	ELECT	220uF	20%	10V (AEP)
C1122	1-128-832-11	ELECT	220uF	20%	10V (EXCEPT AEP)
C1201	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1202	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1203	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1204	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1205	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1205	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1206	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1207	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1207	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1208	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1209	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1210	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1211	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1212	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1213	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1214	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1215	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1216	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1217	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1218	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1219	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1221	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1401	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1402	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1403	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1404	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1405	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1406	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1407	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1408	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1408	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1409	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1410	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1410	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1411	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1412	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1413	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1414	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1415	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1416	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1417	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1419	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1501	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1502	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1503	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1504	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1505	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1505	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1506	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1507	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1507	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1508	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1509	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1510	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1511	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1512	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1513	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1514	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1515	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1516	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1517	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1518	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1601	1-119-824-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C1601	1-119-824-31	ELECT	10uF	20%	50V (AEP)
C1602	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1603	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1604	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1604	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1605	1-119-824-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C1605	1-119-824-31	ELECT	10uF	20%	50V (AEP)
C1606	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1607	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1608	1-119-791-31	ELECT	330uF	20%	16V (AEP)
C1608	1-128-846-11	ELECT	330uF	20%	16V (EXCEPT AEP)
C1609	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C1610	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1611	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1612	1-119-824-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C1612	1-119-824-31	ELECT	10uF	20%	50V (AEP)
C1613	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1614	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1614	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1615	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1616	1-119-791-31	ELECT	330uF	20%	16V (AEP)
C1616	1-128-846-11	ELECT	330uF	20%	16V (EXCEPT AEP)
C1617	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1627	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1628	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1629	1-137-434-11	MYLAR	0.0018uF	5%	50V

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Ref. No.	Part No.	Description			Remark
C1630	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1631	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1632	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1633	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1634	1-137-434-11	MYLAR	0.0018uF	5%	50V
C1635	1-137-428-11	MYLAR	180PF	5%	50V
C1636	1-137-428-11	MYLAR	180PF	5%	50V
C1637	1-137-428-11	MYLAR	180PF	5%	50V
C1638	1-137-428-11	MYLAR	180PF	5%	50V
C1639	1-137-428-11	MYLAR	180PF	5%	50V
C1640	1-137-428-11	MYLAR	180PF	5%	50V
C1641	1-137-428-11	MYLAR	180PF	5%	50V
C1642	1-137-428-11	MYLAR	180PF	5%	50V
C1643	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1643	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1644	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1644	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1645	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1645	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1646	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1646	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1647	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1647	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1648	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1648	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1649	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1649	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1650	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1650	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1651	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1701	1-119-801-21	ELECT	220uF	20%	16V (AEP)
C1701	1-127-719-11	ELECT	220uF	20%	16V (EXCEPT AEP)
C1702	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1703	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1704	1-119-824-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C1704	1-119-824-31	ELECT	10uF	20%	50V (AEP)
C1705	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1706	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1706	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1707	1-137-365-11	MYLAR	0.0015uF	5%	50V
C1708	1-137-365-11	MYLAR	0.0015uF	5%	50V
C1709	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1710	1-119-824-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C1710	1-119-824-31	ELECT	10uF	20%	50V (AEP)
C1711	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1711	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1712	1-119-835-31	ELECT	33uF	20%	63V (AEP)
C1712	1-128-839-11	ELECT	33uF	20%	16V (EXCEPT AEP)
C1713	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1714	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1801	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1801	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1803	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1803	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1805	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1805	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1807	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1807	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1809	1-126-930-11	ELECT	6800uF	20%	10V
C1811	1-137-662-11	ELECT	6800uF	20%	6.3V
C1813	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1813	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1815	1-125-890-11	ELECT	1000uF	20%	6.3V (AEP)
C1815	1-137-658-11	ELECT	1000uF	20%	6.3V (EXCEPT AEP)
C1817	1-119-800-11	ELECT	100uF	20%	16V (AEP)
C1817	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
C1819	1-128-556-11	ELECT	1000uF	20%	6.3V
C1821	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1822	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1825	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1901	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C1902	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1903	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1904	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1905	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1906	1-128-840-11	ELECT	47uF	20%	16V
C1907	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1908	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C2001	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2002	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2003	1-165-319-11	CERAMIC CHIP	0.1uF		50V

Ref. No.	Part No.	Description			Remark
C2004	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2005	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2006	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2007	1-128-840-11	ELECT	47uF	20%	16V
C2008	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2009	1-163-259-11	CERAMIC CHIP	220PF	5%	50V
C2010	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2012	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2013	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2014	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2015	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2016	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2017	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2018	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2019	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2101	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2102	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2103	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2109	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (AEP)
C2110	1-119-824-11	ELECT	10uF	20%	50V (AEP)
C2111	1-165-319-11	CERAMIC CHIP	0.1uF		50V (AEP)
C2112	1-119-824-11	ELECT	10uF	20%	50V (AEP)
C2113	1-163-263-11	CERAMIC CHIP	330PF	5%	50V (AEP)
C2114	1-163-249-11	CERAMIC CHIP	82PF	5%	50V (AEP)
C2115	1-163-243-11	CERAMIC CHIP	47PF	5%	50V (AEP)
C2116	1-165-319-11	CERAMIC CHIP	0.1uF		50V (AEP)
C2117	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2118	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2119	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2120	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2121	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2122	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2123	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2124	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2125	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2126	1-119-820-11	ELECT	1uF	20%	50V
C2127	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2129	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2131	1-127-718-11	ELECT	100uF	20%	16V (EXCEPT AEP)
		< CONNECTOR >			
CN1601	1-784-927-11	PIN, CONNECTOR 12P			
CN1602	1-784-921-11	PIN, CONNECTOR 4P			
CN1701	1-779-799-11	PIN, CONNECTOR 9P			
CN1801	1-784-923-11	PIN, CONNECTOR 7P			
CN1802	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN1803	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN2101	1-784-776-11	CONNECTOR, FFC 15P			
CN2102	1-784-774-11	CONNECTOR, FFC 13P			
CN2103	1-784-774-11	CONNECTOR, FFC 13P			
CN2104	1-784-774-11	CONNECTOR, FFC 13P			

Ref. No.	Part No.	Description	Remark
CN2105	1-784-776-11	CONNECTOR, FFC 15P	
CN2106	1-784-776-11	CONNECTOR, FFC 15P	
CN2107	1-568-838-11	CONNECTOR, FFC 21P	
		< DIODE >	
D1101	8-719-988-61	DIODE 1SS355TE-17	
D1102	8-719-988-61	DIODE 1SS355TE-17	
D1803	8-719-053-18	DIODE 1SR154-400TE-25	
D1804	8-719-053-18	DIODE 1SR154-400TE-25	
D1805	8-719-053-18	DIODE 1SR154-400TE-25	
D1806	8-719-053-18	DIODE 1SR154-400TE-25	
D1812	8-719-988-61	DIODE 1SS355TE-17	
D1901	8-719-801-78	DIODE 1SS184	
D1902	8-719-988-61	DIODE 1SS355TE-17	
D1903	8-719-988-61	DIODE 1SS355TE-17	
D2001	8-719-988-61	DIODE 1SS355TE-17	
D2002	8-719-801-78	DIODE 1SS184	
D2003	8-719-988-61	DIODE 1SS355TE-17 (EXCEPT AEP)	
		< FERRITE BEAD >	
FB1101	1-469-152-11	FERRITE, EMI (SMD)	
FB1102	1-469-152-11	FERRITE, EMI (SMD)	
FB1103	1-469-152-11	FERRITE, EMI (SMD)	
FB1104	1-469-152-11	FERRITE, EMI (SMD)	
FB1105	1-469-152-11	FERRITE, EMI (SMD)	
FB1106	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB1107	1-414-231-22	INDUCTOR, FERRITE BEAD	
FB1108	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB1109	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB1202	1-469-152-11	FERRITE, EMI (SMD)	
FB1203	1-414-231-22	INDUCTOR, FERRITE BEAD	
FB1402	1-469-152-11	FERRITE, EMI (SMD)	
FB1502	1-469-152-11	FERRITE, EMI (SMD)	
FB1503	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB1601	1-469-152-11	FERRITE, EMI (SMD)	
FB1602	1-469-152-11	FERRITE, EMI (SMD)	
FB1603	1-469-152-11	FERRITE, EMI (SMD)	
FB1604	1-469-152-11	FERRITE, EMI (SMD)	
FB1701	1-469-152-11	FERRITE, EMI (SMD)	
FB1901	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2001	1-469-152-11	FERRITE, EMI (SMD)	
FB2101	1-469-152-11	FERRITE, EMI (SMD) (AEP)	
FB2102	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2103	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2104	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2105	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2106	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2107	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2108	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2109	1-500-245-11	INDUCTOR, FERRITE BEAD	
FB2110	1-500-245-11	INDUCTOR, FERRITE BEAD	
		< IC >	
IC1101	8-759-825-15	IC LC89056W-E	
IC1102	8-759-447-77	IC TC7WH74FU(TE12R)	
IC1103	8-759-242-70	IC TC7WU04F	
IC1104	8-759-546-74	IC TC7WH157FU(TE12R)	
IC1201	6-702-047-01	IC CXD9718Q	

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Ref. No.	Part No.	Description	Remark
IC1202	6-700-983-01	IC IS61LV6416-15T(ICSI)	
IC1203	8-759-523-84	IC TC74VHC14FT(EL)	
IC1204	8-759-835-63	IC NJM2391DL1-26(TE1)	
IC1205	8-759-546-74	IC TC7WH157FU(TE12R)	
IC1401	6-700-705-01	IC CXD9616AR	
IC1402	6-700-296-01	IC W24L010AT-12-EL15	
IC1403	6-700-296-01	IC W24L010AT-12-EL15	
IC1404	8-759-523-84	IC TC74VHC14FT(EL)	
IC1405	8-759-835-63	IC NJM2391DL1-26(TE1)	
IC1501	6-700-705-01	IC CXD9616AR	
IC1502	6-700-983-01	IC IS61LV6416-15T(ICSI)	
IC1503	8-759-523-84	IC TC74VHC14FT(EL)	
IC1504	8-759-835-63	IC NJM2391DL1-26(TE1)	
IC1601	6-701-086-01	IC PCM1737E-1/2K	
IC1602	8-759-825-12	IC PCM1604Y/2K	
IC1603	8-759-711-85	IC NJM4580E-D	
IC1604	8-759-711-85	IC NJM4580E-D	
IC1605	8-759-711-85	IC NJM4580E-D	
IC1606	8-759-711-85	IC NJM4580E-D	
IC1607	8-759-277-63	IC TC7W14FU(TE12R)	
IC1701	8-759-462-08	IC AK5352-VF-E2	
IC1702	8-759-711-85	IC NJM4580E-D	
IC1703	8-759-711-85	IC NJM4580E-D	
IC1704	8-759-196-96	IC TC7SH08FU-TE85R	
IC1801	8-759-647-10	IC uPC2933HF	
IC1802	8-759-450-47	IC BA05T	
IC1803	8-759-039-69	IC uPC7805AHF	
IC1804	8-759-245-79	IC TA79005S	
IC1805	8-759-647-10	IC uPC2933HF	
IC1806	8-759-691-04	IC BA00AST	
IC1807	8-759-039-69	IC uPC7805AHF	
IC1808	8-759-647-10	IC uPC2933HF	
IC1809	8-759-088-08	IC uPC7812AHF	
IC1810	8-759-231-53	IC TA7805S	
IC1901	8-759-666-99	IC TMP87CH447U-1F23	
IC1902	8-759-598-06	IC S-80942ANMP-DD6-T2	
IC1903	8-759-058-62	IC TC7S08FU(TE85R)	
IC2001	6-801-827-01	IC MB91F155-2ES-X100	
IC2002	8-759-641-86	IC BR24C16F-E2	
IC2101	8-759-557-36	IC BU1924F-E2 (AEP)	
IC2102	8-759-238-47	IC TC74HCT7007AF(EL)	
IC2103	8-759-342-19	IC NJU3716M-T2	
IC2104	8-759-238-47	IC TC74HCT7007AF(EL)	
IC2105	8-759-238-47	IC TC74HCT7007AF(EL)	
IC2106	8-759-008-37	IC MC74HC4050F	
IC2107	8-759-008-37	IC MC74HC4050F	
IC2108	8-759-238-47	IC TC74HCT7007AF(EL)	
IC2109	8-759-233-44	IC TC74HC595AF	
IC2110	8-759-058-62	IC TC7S08FU(TE85R)	
IC2111	8-759-277-63	IC TC7W14FU(TE12R)	
IC2112	8-759-450-49	IC BA07T (EXCEPT AEP)	
		< JUMPER RESISTOR >	
JR1004	1-216-295-11	SHORT CHIP 0	
JR1005	1-216-295-11	SHORT CHIP 0	
JR1007	1-216-295-11	SHORT CHIP 0	
		< TRANSISTOR >	
Q1101	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q1102	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q1601	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1602	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1603	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1604	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1605	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1606	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1607	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1608	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1609	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q1801	8-729-140-93	TRANSISTOR 2SB733-34	
Q1802	8-729-140-98	TRANSISTOR 2SD773-34	
Q1803	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q1804	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q1805	8-729-140-93	TRANSISTOR 2SB733-34	
Q1806	8-729-140-93	TRANSISTOR 2SB733-34	
Q1807	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q1901	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q1902	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q1903	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q2001	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q2002	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q2003	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q2101	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q2102	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q2103	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q2104	8-729-140-93	TRANSISTOR 2SB733-34 (EXCEPT AEP)	
		< RESISTOR >	
R1101	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R1102	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R1103	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1104	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1105	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R1106	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1107	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1109	1-216-033-00	METAL CHIP 220 5% 1/10W	
R1110	1-216-121-11	RES-CHIP 1M 5% 1/10W	
R1112	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1114	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R1115	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1116	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1118	1-216-304-11	METAL CHIP 3.3 5% 1/10W	
R1119	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R1120	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R1121	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R1122	1-216-121-11	RES-CHIP 1M 5% 1/10W	
R1123	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1124	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R1125	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R1126	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R1201	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1202	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1203	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1204	1-216-295-11	SHORT CHIP 0	

Ref. No.	Part No.	Description			Remark
R1205	1-216-025-11	RES-CHIP	100	5%	1/10W
R1206	1-216-025-11	RES-CHIP	100	5%	1/10W
R1207	1-216-025-11	RES-CHIP	100	5%	1/10W
R1208	1-216-025-11	RES-CHIP	100	5%	1/10W
R1209	1-216-025-11	RES-CHIP	100	5%	1/10W
R1210	1-216-025-11	RES-CHIP	100	5%	1/10W
R1211	1-216-025-11	RES-CHIP	100	5%	1/10W
R1213	1-216-025-11	RES-CHIP	100	5%	1/10W
R1216	1-216-295-11	SHORT CHIP	0		
R1218	1-216-025-11	RES-CHIP	100	5%	1/10W
R1219	1-216-295-11	SHORT CHIP	0		
R1221	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1222	1-216-025-11	RES-CHIP	100	5%	1/10W
R1223	1-216-025-11	RES-CHIP	100	5%	1/10W
R1224	1-216-025-11	RES-CHIP	100	5%	1/10W
R1225	1-216-025-11	RES-CHIP	100	5%	1/10W
R1226	1-216-025-11	RES-CHIP	100	5%	1/10W
R1227	1-216-025-11	RES-CHIP	100	5%	1/10W
R1228	1-216-025-11	RES-CHIP	100	5%	1/10W
R1229	1-216-025-11	RES-CHIP	100	5%	1/10W
R1230	1-216-025-11	RES-CHIP	100	5%	1/10W
R1231	1-216-025-11	RES-CHIP	100	5%	1/10W
R1232	1-216-025-11	RES-CHIP	100	5%	1/10W
R1233	1-216-025-11	RES-CHIP	100	5%	1/10W
R1234	1-216-025-11	RES-CHIP	100	5%	1/10W
R1235	1-216-025-11	RES-CHIP	100	5%	1/10W
R1236	1-216-025-11	RES-CHIP	100	5%	1/10W
R1237	1-216-025-11	RES-CHIP	100	5%	1/10W
R1238	1-216-295-11	SHORT CHIP	0		
R1239	1-216-025-11	RES-CHIP	100	5%	1/10W
R1240	1-216-025-11	RES-CHIP	100	5%	1/10W
R1241	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1242	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1243	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1244	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1245	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1246	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1247	1-216-295-11	SHORT CHIP	0		
R1248	1-216-295-11	SHORT CHIP	0		
R1402	1-216-025-11	RES-CHIP	100	5%	1/10W
R1403	1-216-025-11	RES-CHIP	100	5%	1/10W
R1404	1-216-025-11	RES-CHIP	100	5%	1/10W
R1405	1-216-025-11	RES-CHIP	100	5%	1/10W
R1406	1-216-025-11	RES-CHIP	100	5%	1/10W
R1407	1-216-025-11	RES-CHIP	100	5%	1/10W
R1408	1-216-295-11	SHORT CHIP	0		
R1409	1-216-295-11	SHORT CHIP	0		
R1410	1-216-025-11	RES-CHIP	100	5%	1/10W
R1411	1-216-025-11	RES-CHIP	100	5%	1/10W
R1412	1-216-025-11	RES-CHIP	100	5%	1/10W
R1413	1-216-025-11	RES-CHIP	100	5%	1/10W
R1414	1-216-025-11	RES-CHIP	100	5%	1/10W
R1416	1-216-295-11	SHORT CHIP	0		
R1418	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1419	1-216-025-11	RES-CHIP	100	5%	1/10W
R1420	1-216-025-11	RES-CHIP	100	5%	1/10W
R1421	1-216-025-11	RES-CHIP	100	5%	1/10W
R1422	1-216-025-11	RES-CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R1423	1-216-025-11	RES-CHIP	100	5%	1/10W
R1424	1-216-025-11	RES-CHIP	100	5%	1/10W
R1425	1-216-025-11	RES-CHIP	100	5%	1/10W
R1426	1-216-025-11	RES-CHIP	100	5%	1/10W
R1427	1-216-025-11	RES-CHIP	100	5%	1/10W
R1428	1-216-025-11	RES-CHIP	100	5%	1/10W
R1429	1-216-025-11	RES-CHIP	100	5%	1/10W
R1430	1-216-025-11	RES-CHIP	100	5%	1/10W
R1431	1-216-025-11	RES-CHIP	100	5%	1/10W
R1432	1-216-025-11	RES-CHIP	100	5%	1/10W
R1433	1-216-025-11	RES-CHIP	100	5%	1/10W
R1434	1-216-025-11	RES-CHIP	100	5%	1/10W
R1435	1-216-295-11	SHORT CHIP	0		
R1436	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1437	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1438	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1439	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1440	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1501	1-216-025-11	RES-CHIP	100	5%	1/10W
R1502	1-216-025-11	RES-CHIP	100	5%	1/10W
R1503	1-216-025-11	RES-CHIP	100	5%	1/10W
R1504	1-216-025-11	RES-CHIP	100	5%	1/10W
R1506	1-216-295-11	SHORT CHIP	0		
R1507	1-216-295-11	SHORT CHIP	0		
R1508	1-216-025-11	RES-CHIP	100	5%	1/10W
R1509	1-216-025-11	RES-CHIP	100	5%	1/10W
R1510	1-216-025-11	RES-CHIP	100	5%	1/10W
R1511	1-216-025-11	RES-CHIP	100	5%	1/10W
R1512	1-216-025-11	RES-CHIP	100	5%	1/10W
R1513	1-216-025-11	RES-CHIP	100	5%	1/10W
R1514	1-216-025-11	RES-CHIP	100	5%	1/10W
R1515	1-216-025-11	RES-CHIP	100	5%	1/10W
R1516	1-216-025-11	RES-CHIP	100	5%	1/10W
R1517	1-216-025-11	RES-CHIP	100	5%	1/10W
R1518	1-216-025-11	RES-CHIP	100	5%	1/10W
R1520	1-216-295-11	SHORT CHIP	0		
R1522	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1523	1-216-025-11	RES-CHIP	100	5%	1/10W
R1524	1-216-025-11	RES-CHIP	100	5%	1/10W
R1525	1-216-025-11	RES-CHIP	100	5%	1/10W
R1526	1-216-025-11	RES-CHIP	100	5%	1/10W
R1527	1-216-025-11	RES-CHIP	100	5%	1/10W
R1528	1-216-025-11	RES-CHIP	100	5%	1/10W
R1529	1-216-025-11	RES-CHIP	100	5%	1/10W
R1530	1-216-025-11	RES-CHIP	100	5%	1/10W
R1531	1-216-025-11	RES-CHIP	100	5%	1/10W
R1533	1-216-025-11	RES-CHIP	100	5%	1/10W
R1534	1-216-025-11	RES-CHIP	100	5%	1/10W
R1535	1-216-025-11	RES-CHIP	100	5%	1/10W
R1536	1-216-025-11	RES-CHIP	100	5%	1/10W
R1537	1-216-025-11	RES-CHIP	100	5%	1/10W
R1538	1-216-025-11	RES-CHIP	100	5%	1/10W
R1539	1-216-025-11	RES-CHIP	100	5%	1/10W
R1540	1-216-025-11	RES-CHIP	100	5%	1/10W
R1541	1-216-025-11	RES-CHIP	100	5%	1/10W
R1542	1-216-025-11	RES-CHIP	100	5%	1/10W
R1543	1-216-025-11	RES-CHIP	100	5%	1/10W
R1544	1-216-025-11	RES-CHIP	100	5%	1/10W

DIGITAL

Ref. No.	Part No.	Description			Remark
R1545	1-216-025-11	RES-CHIP	100	5%	1/10W
R1546	1-216-025-11	RES-CHIP	100	5%	1/10W
R1547	1-216-025-11	RES-CHIP	100	5%	1/10W
R1548	1-216-025-11	RES-CHIP	100	5%	1/10W
R1550	1-216-025-11	RES-CHIP	100	5%	1/10W
R1551	1-216-295-11	SHORT CHIP	0		
R1552	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1553	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1554	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1555	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1556	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1601	1-216-025-11	RES-CHIP	100	5%	1/10W
R1602	1-216-025-11	RES-CHIP	100	5%	1/10W
R1603	1-216-025-11	RES-CHIP	100	5%	1/10W
R1604	1-216-025-11	RES-CHIP	100	5%	1/10W
R1605	1-216-025-11	RES-CHIP	100	5%	1/10W
R1606	1-216-025-11	RES-CHIP	100	5%	1/10W
R1607	1-216-025-11	RES-CHIP	100	5%	1/10W
R1608	1-216-025-11	RES-CHIP	100	5%	1/10W
R1609	1-216-025-11	RES-CHIP	100	5%	1/10W
R1610	1-216-025-11	RES-CHIP	100	5%	1/10W
R1611	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1611	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1612	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1612	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1613	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1613	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1614	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1614	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1615	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1615	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1616	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1616	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1617	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1617	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1618	1-208-508-11	RES-CHIP	8.2K	2%	1/8W (EXCEPT AEP)
R1618	1-260-007-11	CARBON MELF	8.2K	2%	1/8W (AEP)
R1619	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1619	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1620	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1620	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)

Ref. No.	Part No.	Description			Remark
R1621	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1621	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1622	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1622	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1623	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1623	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1624	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1624	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1625	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1625	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1626	1-216-230-00	RES-CHIP	22K	2%	1/8W (EXCEPT AEP)
R1626	1-260-012-11	CARBON MELF	22K	2%	1/8W (AEP)
R1627	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1627	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1628	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1628	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1629	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1629	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1630	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1630	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1631	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1631	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1632	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1632	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1633	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1633	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1634	1-216-202-00	RES-CHIP	1.5K	2%	1/8W (EXCEPT AEP)
R1634	1-259-997-11	CARBON MELF	1.5K	2%	1/8W (AEP)
R1635	1-216-246-00	RES-CHIP	100K	2%	1/8W (EXCEPT AEP)
R1635	1-260-020-11	CARBON MELF	100K	2%	1/8W (AEP)
R1636	1-216-246-00	RES-CHIP	100K	2%	1/8W (EXCEPT AEP)

Ref. No.	Part No.	Description				Remark
R1636	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1637	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1637	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1638	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1638	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1639	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1639	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1640	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1640	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1641	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1641	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1642	1-216-246-00	RES-CHIP	100K	2%	1/8W	(EXCEPT AEP)
R1642	1-260-020-11	CARBON MELF	100K	2%	1/8W	(AEP)
R1643	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1644	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1645	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1646	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1647	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1648	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1649	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1650	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R1651	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1651	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1652	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1652	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1653	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1653	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1654	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1654	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1655	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1655	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1656	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1656	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1657	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1657	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1658	1-208-782-11	RES-CHIP	1K	2%	1/8W	(EXCEPT AEP)
R1658	1-259-995-11	CARBON MELF	1K	2%	1/8W	(AEP)
R1659	1-216-121-11	RES-CHIP	1M	5%	1/10W	
R1660	1-216-121-11	RES-CHIP	1M	5%	1/10W	
R1701	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1702	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	
R1703	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	
R1704	1-208-474-61	RES-CHIP	330	2%	1/8W	(EXCEPT AEP)
R1704	1-259-989-11	CARBON MELF	330	2%	1/8W	(AEP)
R1705	1-208-474-61	RES-CHIP	330	2%	1/8W	(EXCEPT AEP)
R1705	1-259-989-11	CARBON MELF	330	2%	1/8W	(AEP)
R1706	1-208-474-61	RES-CHIP	330	2%	1/8W	(EXCEPT AEP)
R1706	1-259-989-11	CARBON MELF	330	2%	1/8W	(AEP)
R1707	1-208-474-61	RES-CHIP	330	2%	1/8W	(EXCEPT AEP)
R1707	1-259-989-11	CARBON MELF	330	2%	1/8W	(AEP)
R1708	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1708	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1709	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1709	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1710	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1710	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1711	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1711	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1712	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1712	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1713	1-208-509-11	RES-CHIP	9.1K	2%	1/8W	(EXCEPT AEP)
R1713	1-259-934-11	CARBON MELF	9.1K	2%	1/8W	(AEP)
R1714	1-216-230-00	RES-CHIP	22K	2%	1/8W	(EXCEPT AEP)
R1714	1-260-012-11	CARBON MELF	22K	2%	1/8W	(AEP)
R1715	1-216-230-00	RES-CHIP	22K	2%	1/8W	(EXCEPT AEP)
R1715	1-260-012-11	CARBON MELF	22K	2%	1/8W	(AEP)
R1716	1-216-238-00	RES-CHIP	47K	2%	1/8W	(EXCEPT AEP)
R1716	1-260-016-11	CARBON MELF	47K	2%	1/8W	(AEP)
R1717	1-216-238-00	RES-CHIP	47K	2%	1/8W	(EXCEPT AEP)

DIGITAL

Ref. No.	Part No.	Description			Remark
R1717	1-260-016-11	CARBON MELF	47K	2%	1/8W (AEP)
R1801	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R1802	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1804	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1806	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1807	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1813	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R1814	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R1815	1-245-290-11	CEMENTED	4.7	5%	5W
R1901	1-216-121-11	RES-CHIP	1M	5%	1/10W
R1902	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1903	1-216-025-11	RES-CHIP	100	5%	1/10W
R1904	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1905	1-216-001-00	METAL CHIP	10	5%	1/10W
R1906	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1907	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1908	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1909	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R1910	1-216-025-11	RES-CHIP	100	5%	1/10W
R1911	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1912	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1913	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1914	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1915	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1916	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1917	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1918	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1919	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2001	1-216-061-11	RES-CHIP	3.3K	5%	1/10W
R2002	1-216-061-11	RES-CHIP	3.3K	5%	1/10W
R2003	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R2004	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R2005	1-216-025-11	RES-CHIP	100	5%	1/10W
R2006	1-216-025-11	RES-CHIP	100	5%	1/10W
R2007	1-216-025-11	RES-CHIP	100	5%	1/10W
R2008	1-216-025-11	RES-CHIP	100	5%	1/10W
R2009	1-216-025-11	RES-CHIP	100	5%	1/10W
R2012	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2014	1-216-025-11	RES-CHIP	100	5%	1/10W
R2015	1-216-025-11	RES-CHIP	100	5%	1/10W
R2016	1-216-025-11	RES-CHIP	100	5%	1/10W
R2017	1-216-025-11	RES-CHIP	100	5%	1/10W
R2018	1-216-025-11	RES-CHIP	100	5%	1/10W
R2019	1-216-025-11	RES-CHIP	100	5%	1/10W
R2020	1-216-025-11	RES-CHIP	100	5%	1/10W
R2021	1-216-025-11	RES-CHIP	100	5%	1/10W
R2022	1-216-025-11	RES-CHIP	100	5%	1/10W
R2024	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2025	1-216-025-11	RES-CHIP	100	5%	1/10W
R2026	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2027	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2028	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2029	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2030	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2031	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2032	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2033	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2034	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2035	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2036	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2037	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2038	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2039	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2040	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2041	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2042	1-216-061-11	RES-CHIP	3.3K	5%	1/10W (AEP)
R2042	1-216-081-00	METAL CHIP	22K	5%	1/10W (TW,KR)
R2042	1-216-295-11	SHORT CHIP	0		(DA4ES)
R2043	1-216-025-11	RES-CHIP	100	5%	1/10W
R2044	1-216-025-11	RES-CHIP	100	5%	1/10W
R2045	1-216-025-11	RES-CHIP	100	5%	1/10W
R2046	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2049	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2050	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2051	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2052	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2053	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2054	1-216-025-11	RES-CHIP	100	5%	1/10W
R2055	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2057	1-216-295-11	SHORT CHIP	0		(EXCEPT AEP)
R2058	1-216-286-00	RES-CHIP	4.7M	5%	1/8W (AEP)
R2059	1-216-295-11	SHORT CHIP	0		
R2060	1-216-295-11	SHORT CHIP	0		(DA4ES/VA333ES)
R2061	1-216-295-11	SHORT CHIP	0		
R2062	1-216-295-11	SHORT CHIP	0		(AEP)
R2101	1-216-025-11	RES-CHIP	100	5%	1/10W
R2102	1-216-025-11	RES-CHIP	100	5%	1/10W
R2103	1-216-025-11	RES-CHIP	100	5%	1/10W
R2104	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP)
R2105	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (AEP)
R2106	1-216-025-11	RES-CHIP	100	5%	1/10W (AEP)
R2107	1-216-025-11	RES-CHIP	100	5%	1/10W
R2108	1-216-025-11	RES-CHIP	100	5%	1/10W
R2109	1-216-025-11	RES-CHIP	100	5%	1/10W
R2110	1-216-025-11	RES-CHIP	100	5%	1/10W
R2111	1-216-025-11	RES-CHIP	100	5%	1/10W
R2112	1-216-025-11	RES-CHIP	100	5%	1/10W
R2113	1-216-025-11	RES-CHIP	100	5%	1/10W
R2114	1-216-025-11	RES-CHIP	100	5%	1/10W
R2115	1-216-025-11	RES-CHIP	100	5%	1/10W
R2116	1-216-025-11	RES-CHIP	100	5%	1/10W
R2117	1-216-025-11	RES-CHIP	100	5%	1/10W
R2118	1-216-025-11	RES-CHIP	100	5%	1/10W
R2119	1-216-025-11	RES-CHIP	100	5%	1/10W
R2120	1-216-025-11	RES-CHIP	100	5%	1/10W
R2121	1-216-025-11	RES-CHIP	100	5%	1/10W
R2122	1-216-025-11	RES-CHIP	100	5%	1/10W
R2123	1-216-025-11	RES-CHIP	100	5%	1/10W
R2124	1-216-025-11	RES-CHIP	100	5%	1/10W
R2125	1-216-025-11	RES-CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R2126	1-216-025-11	RES-CHIP	100	5%	1/10W
R2127	1-216-025-11	RES-CHIP	100	5%	1/10W
R2128	1-216-025-11	RES-CHIP	100	5%	1/10W
R2129	1-216-025-11	RES-CHIP	100	5%	1/10W
R2130	1-216-025-11	RES-CHIP	100	5%	1/10W
R2131	1-216-025-11	RES-CHIP	100	5%	1/10W
R2132	1-216-025-11	RES-CHIP	100	5%	1/10W
R2133	1-216-025-11	RES-CHIP	100	5%	1/10W
R2134	1-216-025-11	RES-CHIP	100	5%	1/10W
R2135	1-216-025-11	RES-CHIP	100	5%	1/10W
R2136	1-216-025-11	RES-CHIP	100	5%	1/10W
R2137	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2138	1-216-025-11	RES-CHIP	100	5%	1/10W
R2139	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2140	1-216-025-11	RES-CHIP	100	5%	1/10W
R2141	1-216-025-11	RES-CHIP	100	5%	1/10W
R2142	1-216-025-11	RES-CHIP	100	5%	1/10W
R2144	1-216-025-11	RES-CHIP	100	5%	1/10W
R2145	1-216-025-11	RES-CHIP	100	5%	1/10W
R2146	1-216-025-11	RES-CHIP	100	5%	1/10W
R2147	1-216-025-11	RES-CHIP	100	5%	1/10W
R2148	1-216-025-11	RES-CHIP	100	5%	1/10W
R2159	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2161	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2162	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2163	1-216-097-11	RES-CHIP	100K	5%	1/10W
R2164	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2165	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2166	1-216-073-00	RES-CHIP	10K	5%	1/10W
R2167	1-216-037-00	METAL CHIP	330	5%	1/10W
R2168	1-216-025-11	RES-CHIP	100	5%	1/10W (DA4ES/DA7ES)
R2169	1-216-025-11	RES-CHIP	100	5%	1/10W (DA4ES/DA7ES)
R2170	1-216-025-11	RES-CHIP	100	5%	1/10W (DA4ES/DA7ES)
R2171	1-216-025-11	RES-CHIP	100	5%	1/10W (DA7ES)
R2172	1-216-025-11	RES-CHIP	100	5%	1/10W (DA4ES/DA7ES)
R2173	1-216-025-11	RES-CHIP	100	5%	1/10W
R2174	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (EXCEPT AEP)
R2175	1-216-073-00	RES-CHIP	10K	5%	1/10W

< VIBRATOR >

Ref. No.	Part No.	Description
X1101	1-795-219-21	VIBRATOR, CRYSTAL (24.576MHz)
X1201	1-795-711-11	VIBRATOR, CRYSTAL (13.5MHz)
X1401	1-781-312-11	VIBRATOR, CERAMIC (12.5MHz)
X1501	1-781-312-11	VIBRATOR, CERAMIC (12.5MHz)
X1901	1-767-938-21	VIBRATOR, CERAMIC (7.28MHz)
X2001	1-795-179-21	VIBRATOR, CERAMIC (16.5MHz)
X2101	1-781-536-11	VIBRATOR, CRYSTAL (4.33MHz) (AEP)

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Ref. No.	Part No.	Description	Remark
	A-4728-944-A	DIGITAL INPUT BOARD, COMPLETE	(DA4ES/DA7ES)
	A-4728-979-A	DIGITAL INPUT BOARD, COMPLETE (VA333ES)	

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< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C1002	1-119-836-31	ELECT	47uF	20%	63V (VA333ES)
C1002	1-128-840-11	ELECT	47uF	20%	16V (DA4ES/DA7ES)
C1003	1-119-836-31	ELECT	47uF	20%	63V (VA333ES)
C1003	1-128-840-11	ELECT	47uF	20%	16V (DA4ES/DA7ES)
C1005	1-163-243-11	CERAMIC CHIP	0.1uF		50V
C1009	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1011	1-125-890-11	ELECT	1000uF	20%	6.3V (VA333ES)
C1011	1-137-658-11	ELECT	1000uF	20%	6.3V (DA4ES/DA7ES)
C1012	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1013	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1014	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1015	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1017	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1018	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1019	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1022	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1023	1-119-799-11	ELECT	47uF	20%	16V (VA333ES)
C1023	1-128-840-11	ELECT	47uF	20%	16V (DA4ES/DA7ES)
C1024	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1025	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1026	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C1027	1-165-319-11	CERAMIC CHIP	0.1uF		50V

< CONNECTOR >

Ref. No.	Part No.	Description
* CN1001	1-564-726-11	PIN, CONNECTOR (SMALL TYPE)10P

< DIODE >

Ref. No.	Part No.	Description
D1001	8-719-988-61	DIODE 1SS355TE-17
D1002	8-719-801-78	DIODE 1SS184
D1003	8-719-988-61	DIODE 1SS355TE-17

< FERRITE BEAD >

Ref. No.	Part No.	Description
FB1001	1-469-152-11	FERRITE, EMI (SMD)
FB1002	1-469-152-11	FERRITE, EMI (SMD)

< IC >

Ref. No.	Part No.	Description
IC1001	6-600-000-01	IC GP1FA512RZB (DVD/LD OPTICAL IN)
IC1002	6-600-000-01	IC GP1FA512RZB (TV/SAT OPTICAL IN)
IC1003	6-600-000-01	IC GP1FA512RZB (MD/DAT OPTICAL IN)
IC1004	6-600-001-01	IC GP1FA512TZC (MD/DAT OPTICAL OUT)
IC1005	6-600-000-01	IC GP1FA512RZB (CD/SACD OPTICAL IN)
IC1006	8-759-233-64	IC TC74HCU04AF
IC1007	8-759-243-84	IC TC74ACT151F
IC1008	8-759-566-06	IC TC7WH08FU(TE12R)

DIGITAL INPUT DISPLAY

Ref. No.	Part No.	Description	Remark
		< JACK >	
J1002	1-794-434-11	JACK, PIN 2P (CD/SACD COAXIAL IN, DVD/LD COAXIAL IN)	
		< RESISTOR >	
R1001	1-208-410-41	RES-CHIP 75 2% 1/8W	(DA4ES/DA7ES)
R1001	1-259-909-11	CARBON MELF 75 2% 1/8W	(VA333ES)
R1002	1-208-410-41	RES-CHIP 75 2% 1/8W	(DA4ES/DA7ES)
R1002	1-259-909-11	CARBON MELF 75 2% 1/8W	(VA333ES)
R1003	1-216-190-00	RES-CHIP 470 2% 1/8W	(DA4ES/DA7ES)
R1003	1-259-991-11	CARBON MELF 470 2% 1/8W	(VA333ES)
R1004	1-216-190-00	RES-CHIP 470 2% 1/8W	(DA4ES/DA7ES)
R1004	1-259-991-11	CARBON MELF 470 2% 1/8W	(VA333ES)
R1005	1-216-230-00	RES-CHIP 22K 2% 1/8W	(DA4ES/DA7ES)
R1005	1-260-012-11	CARBON MELF 22K 2% 1/8W	(VA333ES)
R1006	1-216-230-00	RES-CHIP 22K 2% 1/8W	(DA4ES/DA7ES)
R1006	1-260-012-11	CARBON MELF 22K 2% 1/8W	(VA333ES)
R1007	1-208-593-41	RES-CHIP 560K 2% 1/8W	(DA4ES/DA7ES)
R1007	1-260-029-11	CARBON MELF 560K 2% 1/8W	(VA333ES)
R1008	1-208-593-41	RES-CHIP 560K 2% 1/8W	(DA4ES/DA7ES)
R1008	1-260-029-11	CARBON MELF 560K 2% 1/8W	(VA333ES)
R1009	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1010	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1011	1-216-295-11	SHORT CHIP 0	
R1012	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1013	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1014	1-216-025-11	RES-CHIP 100 5% 1/10W	
R1016	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R1017	1-216-025-11	RES-CHIP 100 5% 1/10W	
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	A-4728-901-A	DISPLAY BOARD, COMPLETE (VA333ES)	
	A-4728-931-A	DISPLAY BOARD, COMPLETE (DA4ES/DA7ES)	
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	4-228-836-01	HOLDER, FL TUBE	
		< CAPACITOR >	
C101	1-126-947-11	ELECT 47uF 20% 16V	
C102	1-126-964-11	ELECT 10uF 20% 50V	
C103	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C104	1-126-947-11	ELECT 47uF 20% 16V	
C105	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C106	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C107	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C109	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C110	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C111	1-126-916-11	ELECT 1000uF 20% 6.3V	
C126	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C127	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
		< CONNECTOR >	
CNP113	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CNS101	1-784-776-11	CONNECTOR, FFC 15P	
CNS102	1-568-838-11	CONNECTOR, FFC 21P	
		< DIODE >	
D101	8-719-075-59	LED SELS5B23C-TP15	(digital cinema sound)
D102	8-719-075-59	LED SELS5B23C-TP15 (SB DEC)	
D103	8-719-075-59	LED SELS5B23C-TP15 (NIGHT MODE)	
D104	8-719-032-98	LED SEL5820A-TP15 (DIMMER)	
D105	8-719-032-98	LED SEL5820A-TP15 (2ND ROOM)	
D106	8-719-032-98	LED SEL5820A-TP15 (SURROUND)	
D107	8-719-032-98	LED SEL5820A-TP15 (LEVEL)	
D108	8-719-032-98	LED SEL5820A-TP15 (CUSTOMIZE)	
D109	8-719-032-98	LED SEL5820A-TP15 (EQ)	
D110	8-719-032-98	LED SEL5820A-TP15 (SET UP)	
D111	8-719-075-86	LED SID307BR-TP19 (SIRCS OUT)	
D112	8-719-059-14	LED SID313BP-TP19 (SIRCS OUT)	
D113	8-719-075-86	LED SID307BR-TP19 (SIRCS OUT)	
D114	8-719-988-61	DIODE 1SS355TE-17	
D115	8-719-988-61	DIODE 1SS355TE-17	
D119	8-719-988-61	DIODE 1SS355TE-17	
D120	8-719-988-61	DIODE 1SS355TE-17	
		< FLUORESCENT INDICATOR >	
FL101	1-518-747-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC101	8-759-459-85	IC NJL63H400A	
IC102	8-759-342-19	IC NJU3716M-T2	
IC104	8-759-242-70	IC TC7WU04F	
		< TRANSISTOR >	
Q101	8-729-801-93	TRANSISTOR 2SD1387	
Q102	8-729-801-93	TRANSISTOR 2SD1387	
		< RESISTOR >	
R101	1-216-025-11	RES-CHIP 100 5% 1/10W	
R102	1-216-025-11	RES-CHIP 100 5% 1/10W	
R103	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R104	1-216-025-11	RES-CHIP 100 5% 1/10W	
R105	1-216-025-11	RES-CHIP 100 5% 1/10W	
R106	1-216-025-11	RES-CHIP 100 5% 1/10W	
R107	1-216-025-11	RES-CHIP 100 5% 1/10W	
R108	1-216-025-11	RES-CHIP 100 5% 1/10W	
R109	1-216-025-11	RES-CHIP 100 5% 1/10W	
R110	1-216-025-11	RES-CHIP 100 5% 1/10W	
R111	1-216-025-11	RES-CHIP 100 5% 1/10W	
R112	1-216-025-11	RES-CHIP 100 5% 1/10W	
R113	1-216-025-11	RES-CHIP 100 5% 1/10W	
R117	1-216-073-00	RES-CHIP 10K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R118	1-216-001-00	METAL CHIP	10	5%	1/10W
R119	1-249-385-11	CARBON	2.2	5%	1/6W
R120	1-249-385-11	CARBON	2.2	5%	1/6W
R121	1-216-037-00	METAL CHIP	330	5%	1/10W
R122	1-216-037-00	METAL CHIP	330	5%	1/10W
R123	1-216-089-11	RES-CHIP	47K	5%	1/10W
R124	1-216-049-11	RES-CHIP	1K	5%	1/10W
R125	1-216-049-11	RES-CHIP	1K	5%	1/10W
R126	1-216-037-00	METAL CHIP	330	5%	1/10W
R127	1-216-029-00	METAL CHIP	150	5%	1/10W
R128	1-216-029-00	METAL CHIP	150	5%	1/10W
R129	1-216-037-00	METAL CHIP	330	5%	1/10W
R131	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R132	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R133	1-216-073-00	RES-CHIP	10K	5%	1/10W
R134	1-216-073-00	RES-CHIP	10K	5%	1/10W
R135	1-216-089-11	RES-CHIP	47K	5%	1/10W
R136	1-216-089-11	RES-CHIP	47K	5%	1/10W
R137	1-216-089-11	RES-CHIP	47K	5%	1/10W
R138	1-216-081-00	METAL CHIP	22K	5%	1/10W
R139	1-216-073-00	RES-CHIP	10K	5%	1/10W
R140	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R141	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R142	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R143	1-216-049-11	RES-CHIP	1K	5%	1/10W
R144	1-216-073-00	RES-CHIP	10K	5%	1/10W
R145	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R146	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R147	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R148	1-216-049-11	RES-CHIP	1K	5%	1/10W
R149	1-216-089-11	RES-CHIP	47K	5%	1/10W
R150	1-216-081-00	METAL CHIP	22K	5%	1/10W
R151	1-216-073-00	RES-CHIP	10K	5%	1/10W
R152	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R153	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R154	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R155	1-216-049-11	RES-CHIP	1K	5%	1/10W
R156	1-216-089-11	RES-CHIP	47K	5%	1/10W
R157	1-216-081-00	METAL CHIP	22K	5%	1/10W
R158	1-216-073-00	RES-CHIP	10K	5%	1/10W
R159	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R160	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R161	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R162	1-216-049-11	RES-CHIP	1K	5%	1/10W
R163	1-216-073-00	RES-CHIP	10K	5%	1/10W
R175	1-216-073-00	RES-CHIP	10K	5%	1/10W
R176	1-216-073-00	RES-CHIP	10K	5%	1/10W
		< ROTARY ENCODER >			
RV102	1-418-921-11	ENCODER, ROTARY (JOG DIAL)			
		< SWITCH >			
S101	1-771-349-21	SWITCH, KEYBOARD (POWER)			
S102	1-771-349-21	SWITCH, KEYBOARD (DISPLAY)			
S103	1-771-349-21	SWITCH, KEYBOARD (DIMMER)			
S104	1-771-349-21	SWITCH, KEYBOARD (CINEMA STUDIO EX)			
S105	1-771-349-21	SWITCH, KEYBOARD (FM/AM)			

Ref. No.	Part No.	Description	Remark
S106	1-771-349-21	SWITCH, KEYBOARD (PRESET TUNING –)	
S107	1-771-349-21	SWITCH, KEYBOARD (PRESET TUNING +)	
S108	1-771-349-21	SWITCH, KEYBOARD (AUTO DEC)	
S109	1-771-349-21	SWITCH, KEYBOARD (MODE –)	
S110	1-771-349-21	SWITCH, KEYBOARD (MODE +)	
S111	1-771-349-21	SWITCH, KEYBOARD (2CH STEREO)	
S112	1-771-349-21	SWITCH, KEYBOARD (ANALOG DIRECT)	
S113	1-771-349-21	SWITCH, KEYBOARD (MULTI CH DIRECT)	
S114	1-771-349-21	SWITCH, KEYBOARD (DOLBY PL II/NEO:6)	
S115	1-771-349-21	SWITCH, KEYBOARD (SURR BACK DECODING)	
S116	1-771-349-21	SWITCH, KEYBOARD (TUNING –)	
S117	1-771-349-21	SWITCH, KEYBOARD (TUNING +)	
S118	1-771-349-21	SWITCH, KEYBOARD (2ND/3RD ROOM)	
S119	1-771-349-21	SWITCH, KEYBOARD (ON SCREEN)	
S120	1-771-349-21	SWITCH, KEYBOARD (SURROUND)	
S121	1-771-349-21	SWITCH, KEYBOARD (LEVEL)	
S122	1-771-349-21	SWITCH, KEYBOARD (JOG <)	
S123	1-771-349-21	SWITCH, KEYBOARD (JOG >)	
S124	1-771-349-21	SWITCH, KEYBOARD (FM MODE)	
S125	1-771-349-21	SWITCH, KEYBOARD (MEMORY)	
S126	1-771-349-21	SWITCH, KEYBOARD (NIGHT MODE)	
S127	1-771-349-21	SWITCH, KEYBOARD (EQ BANK)	
S128	1-771-349-21	SWITCH, KEYBOARD (CUSTOMIZE)	
S129	1-771-349-21	SWITCH, KEYBOARD (EQ)	
S130	1-771-349-21	SWITCH, KEYBOARD (ENTER)	
S131	1-771-349-21	SWITCH, KEYBOARD (SET UP)	
		< SWITCH >	
SW101	1-762-268-11	SWITCH, ROTARY (SPEAKERS)	

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Ref. No.	Part No.	Description				Remark
	A-4728-878-A	E-VOL BOARD, COMPLETE (DA4ES)				
	A-4728-891-A	E-VOL BOARD, COMPLETE (VA333ES)				
	A-4728-911-A	E-VOL BOARD, COMPLETE (DA7ES)				
		**********************				
		< CAPACITOR >				
C401	1-119-825-41	ELECT	22uF	20%	50V	(VA333ES)
C401	1-128-858-11	ELECT	22uF	20%	50V	(DA4ES/DA7ES)
C402	1-119-825-41	ELECT	22uF	20%	50V	(VA333ES)
C402	1-128-858-11	ELECT	22uF	20%	50V	(DA4ES/DA7ES)
C403	1-119-779-11	ELECT	220uF	20%	10V	(VA333ES)
C403	1-128-832-11	ELECT	220uF	20%	10V	(DA4ES/DA7ES)
C404	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(VA333ES)
C405	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(VA333ES)
C406	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(VA333ES)
C407	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(VA333ES)
C408	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(VA333ES)

E-VOL

Ref. No.	Part No.	Description			Remark
C409	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C410	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C411	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C411	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C412	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C412	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C413	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C413	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C414	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C415	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C416	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C417	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C418	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C419	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C420	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C421	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C421	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C422	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C422	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C423	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C423	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C424	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C425	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C426	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C427	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C428	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C429	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C430	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C431	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C431	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C432	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C432	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C433	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C433	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C434	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C435	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C436	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C438	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C439	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C440	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C441	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C441	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C442	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C442	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C443	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C443	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C444	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C445	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C446	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C447	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C448	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C449	1-127-718-11	ELECT	100uF	20%	16V
C450	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C450	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C451	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C451	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C452	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C452	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C453	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C453	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C454	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C454	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C455	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C455	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C456	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C456	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)

Ref. No.	Part No.	Description			Remark
C457	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C457	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C458	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C458	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C459	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C459	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C460	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C460	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C461	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C461	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C462	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C462	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C463	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C463	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C466	1-137-505-11	MYLAR	220PF	5%	50V
C467	1-137-505-11	MYLAR	220PF	5%	50V
C468	1-137-505-11	MYLAR	220PF	5%	50V
C469	1-137-505-11	MYLAR	220PF	5%	50V
C470	1-137-505-11	MYLAR	220PF	5%	50V
C471	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C471	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C472	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C472	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C473	1-119-779-11	ELECT	220uF	20%	10V (VA333ES)
C473	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C474	1-137-505-11	MYLAR	220PF	5%	50V
C475	1-137-505-11	MYLAR	220PF	5%	50V
C476	1-137-505-11	MYLAR	220PF	5%	50V
C477	1-119-827-11	ELECT	47uF	20%	50V (VA333ES)
C477	1-128-860-11	ELECT	47uF	20%	50V (DA4ES/DA7ES)
C478	1-119-827-11	ELECT	47uF	20%	50V (VA333ES)
C478	1-128-860-11	ELECT	47uF	20%	50V (DA4ES/DA7ES)
C481	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C482	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C483	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C484	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C485	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C486	1-163-251-11	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description			Remark
C487	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C488	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C490	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C491	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C493	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C494	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C496	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C497	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C498	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C499	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C500	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C501	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C502	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C503	1-137-505-11	MYLAR	220PF	5%	50V (DA7ES)
C504	1-137-505-11	MYLAR	220PF	5%	50V (DA7ES)
C505	1-128-832-11	ELECT	220uF	20%	10V (DA7ES)
C506	1-128-832-11	ELECT	220uF	20%	10V (DA7ES)
C507	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (DA7ES)
C508	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (DA7ES)
C509	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA7ES)
C511	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C512	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C551	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C552	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C553	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C554	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C555	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C555	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C556	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C556	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)

< CONNECTOR >

CNP401	1-784-929-11	PIN, CONNECTOR 14P
CNP402	1-784-774-11	CONNECTOR, FFC 13P
CNP403	1-784-921-11	PIN, CONNECTOR 4P
CNP408	1-784-929-11	PIN, CONNECTOR 14P

< DIODE >

D401	8-719-988-61	DIODE	1SS355TE-17	
D404	8-719-988-61	DIODE	1SS355TE-17	
D405	8-719-988-61	DIODE	1SS355TE-17	
D406	8-719-988-61	DIODE	1SS355TE-17	
D407	8-719-988-61	DIODE	1SS355TE-17	
D408	8-719-988-61	DIODE	1SS355TE-17	(DA7ES)

E-VOL

Ref. No.	Part No.	Description				Remark
		< FERRITE BEAD >				
FB401	1-469-152-11	FERRITE, EMI (SMD)				
		< IC >				
IC401	8-759-663-90	IC ADM3222ARU-REEL				
IC402	8-759-835-79	IC TC9274N-016				
IC403	6-702-387-01	IC CXD9725M				
IC404	6-702-387-01	IC CXD9725M				
IC405	6-702-387-01	IC CXD9725M				
IC406	6-702-387-01	IC CXD9725M				
IC407	8-759-711-85	IC NJM4580E-D				
IC408	8-759-711-85	IC NJM4580E-D				
IC409	8-759-711-85	IC NJM4580E-D				
IC410	8-759-711-85	IC NJM4580E-D				
IC411	8-759-835-76	IC TC94A07P (DA7ES)				
IC412	8-759-711-85	IC NJM4580E-D (DA7ES)				
IC413	8-759-711-85	IC NJM4580E-D				
IC414	8-759-711-85	IC NJM4580E-D				
IC415	8-759-711-85	IC NJM4580E-D				
IC416	8-759-711-85	IC NJM4580E-D				
IC551	8-759-590-10	IC TC9273F-012(EL)				
IC552	8-759-711-85	IC NJM4580E-D				
IC553	8-759-711-85	IC NJM4580E-D				
		< JACK >				
J401	1-793-345-21	JACK, PIN 6P (MULTI CHANNEL INPUT 2)				
J402	1-784-934-11	JACK, PIN 4P (MULTI CHANNEL INPUT 1, FRONT/SURROUND)				
J403	1-815-520-11	JACK, PIN 4P (MULTI CHANNEL INPUT 1, SURR BACK/CENTER/SUB WOOFER)				
J404	1-784-934-11	JACK, PIN 4P (PRE OUT,FRONT/SURROUND)				
J405	1-815-520-11	JACK, PIN 4P (PRE OUT, SURR BACK/CENTER/SUB WOOFER)				
J406	1-774-822-21	JACK, PIN 2P (PRE OUT,3RD) (DA7ES)				
J407	1-815-737-11	CONNECTOR, (D) SUB 9P (RS232C)				
		< TRANSISTOR >				
Q401	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q404	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q405	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q406	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q407	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q408	8-729-230-49	TRANSISTOR 2SC2712-YG (DA7ES)				
		< RESISTOR >				
R401	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R401	1-260-020-11	CARBON MELF	100K	2%	1/8W	(VA333ES)
R402	1-216-013-00	METAL CHIP	33	5%	1/10W	
R403	1-216-013-00	METAL CHIP	33	5%	1/10W	
R404	1-216-013-00	METAL CHIP	33	5%	1/10W	
R405	1-216-013-00	METAL CHIP	33	5%	1/10W	
R406	1-216-013-00	METAL CHIP	33	5%	1/10W	
R407	1-216-013-00	METAL CHIP	33	5%	1/10W	
R408	1-216-013-00	METAL CHIP	33	5%	1/10W	
R409	1-216-013-00	METAL CHIP	33	5%	1/10W	

Ref. No.	Part No.	Description				Remark
R410	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R410	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R411	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R411	1-260-020-11	CARBON MELF	100K	2%	1/8W	(VA333ES)
R412	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R412	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R413	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R413	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R414	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R414	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R415	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R415	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R416	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R416	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R417	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R417	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R418	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R418	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R419	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R419	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R420	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R420	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R421	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R421	1-260-020-11	CARBON MELF	100K	2%	1/8W	(VA333ES)
R422	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R422	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R423	1-216-174-00	RES-CHIP	100	2%	1/8W	(DA4ES/DA7ES)
R423	1-259-983-11	CARBON MELF	100	2%	1/8W	(VA333ES)
R424	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R424	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R425	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)

Ref. No.	Part No.	Description			Remark
R425	1-260-004-11	CARBON MELF	4.7K	2%	1/8W (VA333ES)
R426	1-216-174-00	RES-CHIP	100	2%	1/8W (DA4ES/DA7ES)
R426	1-259-983-11	CARBON MELF	100	2%	1/8W (VA333ES)
R427	1-216-174-00	RES-CHIP	100	2%	1/8W (DA4ES/DA7ES)
R427	1-259-983-11	CARBON MELF	100	2%	1/8W (VA333ES)
R428	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R428	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R429	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R429	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R430	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R430	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R431	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA4ES/DA7ES)
R431	1-260-020-11	CARBON MELF	100K	2%	1/8W (VA333ES)
R432	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R432	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R433	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R433	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R434	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R434	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R435	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R435	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R436	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R436	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R437	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R437	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R438	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R438	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R439	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R439	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R440	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R440	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R441	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA4ES/DA7ES)
R441	1-260-020-11	CARBON MELF	100K	2%	1/8W (VA333ES)
R442	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R442	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R443	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R443	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R444	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R444	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R445	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R445	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R446	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R446	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R447	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R447	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R448	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R448	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R449	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R449	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R450	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R450	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R451	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA4ES/DA7ES)
R451	1-260-020-11	CARBON MELF	100K	2%	1/8W (VA333ES)
R452	1-216-025-11	RES-CHIP	100	5%	1/10W
R453	1-216-025-11	RES-CHIP	100	5%	1/10W
R454	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R454	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R455	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R455	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R456	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R456	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R457	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R457	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)

E-VOL

Ref. No.	Part No.	Description			Remark
R458	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R458	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R459	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R459	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R460	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R460	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R461	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA4ES/DA7ES)
R461	1-260-020-11	CARBON MELF	100K	2%	1/8W (VA333ES)
R462	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R462	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R463	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA4ES/DA7ES)
R463	1-259-995-11	CARBON MELF	1K	2%	1/8W (VA333ES)
R464	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA7ES)
R465	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA7ES)
R466	1-249-393-11	CARBON	10	5%	1/4W (DA7ES)
R467	1-216-073-00	RES-CHIP	10K	5%	1/10W (DA7ES)
R468	1-216-065-11	RES-CHIP	4.7K	5%	1/10W (DA7ES)
R469	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA7ES)
R470	1-208-782-11	RES-CHIP	1K	2%	1/8W (DA7ES)
R471	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA4ES/DA7ES)
R471	1-260-020-11	CARBON MELF	100K	2%	1/8W (VA333ES)
R473	1-216-097-11	RES-CHIP	100K	5%	1/10W (DA7ES)
R474	1-216-097-11	RES-CHIP	100K	5%	1/10W (DA7ES)
R477	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA7ES)
R478	1-216-246-00	RES-CHIP	100K	2%	1/8W (DA7ES)
R479	1-216-013-00	METAL CHIP	33	5%	1/10W (DA7ES)
R480	1-216-013-00	METAL CHIP	33	5%	1/10W (DA7ES)
R481	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R482	1-216-073-00	RES-CHIP	10K	5%	1/10W
R483	1-249-393-11	CARBON	10	5%	1/4W
R484	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA7ES)
R485	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA7ES)
R486	1-216-174-00	RES-CHIP	100	2%	1/8W (DA7ES)
R487	1-216-174-00	RES-CHIP	100	2%	1/8W (DA7ES)
R488	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA7ES)
R489	1-216-214-00	RES-CHIP	4.7K	2%	1/8W (DA7ES)
R490	1-216-097-11	RES-CHIP	100K	5%	1/10W
R491	1-216-097-11	RES-CHIP	100K	5%	1/10W
R492	1-216-097-11	RES-CHIP	100K	5%	1/10W
R493	1-216-097-11	RES-CHIP	100K	5%	1/10W
R494	1-216-013-00	METAL CHIP	33	5%	1/10W
R495	1-216-013-00	METAL CHIP	33	5%	1/10W
R496	1-249-393-11	CARBON	10	5%	1/4W
R497	1-216-073-00	RES-CHIP	10K	5%	1/10W
R498	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R499	1-249-393-11	CARBON	10	5%	1/4W
R500	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R501	1-216-073-00	RES-CHIP	10K	5%	1/10W
R502	1-249-393-11	CARBON	10	5%	1/4W
R503	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R504	1-216-073-00	RES-CHIP	10K	5%	1/10W
R505	1-249-393-11	CARBON	10	5%	1/4W
R506	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R507	1-216-073-00	RES-CHIP	10K	5%	1/10W
R508	1-208-581-41	RES-CHIP	180K	2%	1/8W (DA4ES/DA7ES)
R508	1-260-023-11	CARBON MELF	180K	2%	1/8W (VA333ES)
R509	1-208-581-41	RES-CHIP	180K	2%	1/8W (DA4ES/DA7ES)
R509	1-260-023-11	CARBON MELF	180K	2%	1/8W (VA333ES)
R510	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R510	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R511	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R511	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R512	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R512	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R513	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R513	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R514	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R514	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R515	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R515	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R516	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)
R516	1-260-018-11	CARBON MELF	68K	2%	1/8W (VA333ES)
R517	1-208-571-11	RES-CHIP	68K	2%	1/8W (DA4ES/DA7ES)

Ref. No.	Part No.	Description				Remark
R517	1-260-018-11	CARBON MELF	68K	2%	1/8W	(VA333ES)
R518	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R518	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R519	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R519	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R520	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R520	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R521	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R521	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R522	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R522	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R523	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA4ES/DA7ES)
R523	1-260-023-11	CARBON MELF	180K	2%	1/8W	(VA333ES)
R551	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R551	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R552	1-208-810-11	RES-CHIP	15K	2%	1/8W	(DA4ES/DA7ES)
R552	1-260-010-11	CARBON MELF	15K	2%	1/8W	(VA333ES)
R553	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R553	1-260-004-11	CARBON MELF	4.7K	2%	1/8W	(VA333ES)
R554	1-208-810-11	RES-CHIP	15K	2%	1/8W	(DA4ES/DA7ES)
R554	1-260-010-11	CARBON MELF	15K	2%	1/8W	(VA333ES)
R555	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R555	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R556	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R556	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R557	1-216-013-00	METAL CHIP	33	5%	1/10W	
R558	1-216-013-00	METAL CHIP	33	5%	1/10W	
R559	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R559	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R560	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R560	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R561	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R561	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R562	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R562	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R563	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R563	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R564	1-216-222-00	RES-CHIP	10K	2%	1/8W	(DA4ES/DA7ES)
R564	1-260-008-11	CARBON MELF	10K	2%	1/8W	(VA333ES)
R565	1-208-810-11	RES-CHIP	15K	2%	1/8W	(DA4ES/DA7ES)
R565	1-260-010-11	CARBON MELF	15K	2%	1/8W	(VA333ES)
R566	1-208-810-11	RES-CHIP	15K	2%	1/8W	(DA4ES/DA7ES)
R566	1-260-010-11	CARBON MELF	15K	2%	1/8W	(VA333ES)

< RELAY >

RY401	1-515-614-11	RELAY
RY404	1-755-484-11	RELAY
RY405	1-755-484-11	RELAY
RY406	1-755-484-11	RELAY
RY407	1-515-614-11	RELAY
RY408	1-755-484-11	RELAY (DA7ES)

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A-4728-904-A F-SPTM BOARD, COMPLETE (VA333ES)
A-4728-940-A F-SPTM BOARD, COMPLETE (DA4ES/DA7ES)
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< CAPACITOR >

C511	1-137-150-11	MYLAR	0.01uF	5%	50V
C561	1-137-150-11	MYLAR	0.01uF	5%	50V
C563	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C564	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C565	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C566	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C694	1-137-150-11	MYLAR	0.01uF	5%	50V
C695	1-163-133-00	CERAMIC CHIP	470PF	5%	50V

< CONNECTOR >

CNP506	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P
CNP507	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P
CNP651	1-564-723-11	PIN, CONNECTOR (SMALL TYPE) 7P
CNS506	1-784-776-11	CONNECTOR, FFC 15P

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D540	8-719-988-61	DIODE 1SS355TE-17	
D541	8-719-988-61	DIODE 1SS355TE-17	
D542	8-719-988-61	DIODE 1SS355TE-17	
D543	8-719-988-61	DIODE 1SS355TE-17	
D544	8-719-988-61	DIODE 1SS355TE-17	
D545	8-719-988-61	DIODE 1SS355TE-17	
D546	8-719-988-61	DIODE 1SS355TE-17	
D598	8-719-988-61	DIODE 1SS355TE-17	
D607	8-719-988-61	DIODE 1SS355TE-17	
D667	8-719-988-61	DIODE 1SS355TE-17	
		< COIL >	
L501	1-422-009-13	COIL, AIR-CORE	
L551	1-422-009-13	COIL, AIR-CORE	
L651	1-422-009-13	COIL, AIR-CORE	
		< TRANSISTOR >	
Q598	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q611	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q621	8-729-230-49	TRANSISTOR 2SC2712-YG	
		< RESISTOR >	
R511	1-249-389-11	CARBON 4.7 5% 1/4W	
R512	1-249-393-11	CARBON 10 5% 1/4W	
R561	1-249-389-11	CARBON 4.7 5% 1/4W	
R562	1-249-393-11	CARBON 10 5% 1/4W	
R584	1-249-393-11	CARBON 10 5% 1/4W	
R585	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R586	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R589	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R617	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R632	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R633	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R634	1-249-393-11	CARBON 10 5% 1/4W	
R642	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R644	1-249-393-11	CARBON 10 5% 1/4W	
R645	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R655	1-249-389-11	CARBON 4.7 5% 1/4W	
R683	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
R698	1-249-393-11	CARBON 10 5% 1/4W	
R733	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	
		< RELAY >	
RY503	1-515-920-11	RELAY (24V)	
RY601	1-515-920-11	RELAY (24V)	
RY661	1-515-920-11	RELAY (24V)	
		< TERMINAL >	
TM501	1-694-935-11	TERMINAL BOARD (8P) (SPEAKERS,FRONT A/B)	(DA4ES/DA7ES)
TM501	1-694-935-21	TERMINAL BOARD (8P) (SPEAKERS,FRONT A/B)	(VA333ES)
TM601	1-694-910-11	TERMINAL BOARD (2P) (SPEAKERS,CENTER)	(DA4ES/DA7ES)
TM601	1-694-910-21	TERMINAL BOARD (2P) (SPEAKERS,CENTER)	(VA333ES)

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Ref. No.	Part No.	Description	Remark
	1-685-487-11	FUNCTION BOARD ***************	
		< CONNECTOR >	
CNP106	1-784-922-11	PIN, CONNECTOR 5P	
		< DIODE >	
D116	8-719-032-98	LED SEL5820A (AUDIO SPLIT)	
		< RESISTOR >	
R165	1-216-029-00	METAL CHIP 150 5% 1/10W	
R166	1-216-049-11	RES-CHIP 1K 5% 1/10W	
R167	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
		< ROTARY ENCODER >	
RV101	1-467-808-21	ENCODER, ROTARY (FUNCTION)	
		< SWITCH >	
S132	1-771-349-21	SWITCH, KEYBOARD (AUDIO SPLIT)	
S133	1-771-349-21	SWITCH, KEYBOARD (INPUT MODE)	
S134	1-771-349-21	SWITCH, KEYBOARD (MUTING)	

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Ref. No.	Part No.	Description	Remark
	1-685-488-11	HP BOARD *********	
		< CAPACITOR >	
C120	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	(VA333ES)
C121	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	(VA333ES)
		< CONNECTOR >	
CNP109	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CNP111	1-779-978-11	PIN, CONNECTOR 3P	
		< JACK >	
J101	1-815-313-21	JACK (PHONES)	

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Ref. No.	Part No.	Description	Remark
	A-4728-880-A	INPUT BOARD, COMPLETE (DA4ES)	
	A-4728-893-A	INPUT BOARD, COMPLETE (VA333ES)	
	A-4728-915-A	INPUT BOARD, COMPLETE (DA7ES) *********************	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3 (DA4ES/DA7ES)	
		< CAPACITOR >	
C301	1-119-821-11	ELECT 2.2uF 20% 50V	
C302	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C303	1-128-832-11	ELECT 220uF 20% 10V	
C304	1-125-896-11	MYLAR 0.0091uF 5% 50V	
C305	1-136-159-00	MYLAR 0.033uF 5% 50V	
C306	1-126-045-11	ELECT 2.2uF 20% 50V	
C308	1-163-001-11	CERAMIC CHIP 220PF 10% 50V	

Ref. No.	Part No.	Description			Remark
C309	1-163-033-11	CERAMIC CHIP	0.022uF		50V
C310	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C311	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C312	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C313	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C314	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C315	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C316	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C317	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C318	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C319	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C320	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C321	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C323	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C324	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C325	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C325	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C326	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C326	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C327	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C328	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C329	1-119-805-21	ELECT	2200uF	20%	25V (VA333ES)
C329	1-127-728-51	ELECT	2200uF	20%	25V (DA4ES/DA7ES)
C330	1-119-805-21	ELECT	2200uF	20%	25V (VA333ES)
C330	1-127-728-51	ELECT	2200uF	20%	25V (DA4ES/DA7ES)
C331	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)
C332	1-137-505-11	MYLAR	220PF	5%	50V (DA4ES/DA7ES)
C333	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C335	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V (DA4ES/DA7ES)
C341	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C342	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C343	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C344	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C345	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C346	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C347	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C348	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C349	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C350	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C351	1-119-821-11	ELECT	2.2uF	20%	50V
C352	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C353	1-128-832-11	ELECT	220uF	20%	10V
C354	1-125-896-11	MYLAR	0.0091uF	5%	50V
C355	1-136-159-00	MYLAR	0.033uF	5%	50V
C356	1-126-045-11	ELECT	2.2uF	20%	50V
C357	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V (VA333ES)
C358	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C359	1-163-033-11	CERAMIC CHIP	0.022uF		50V
C360	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C361	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C362	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C363	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C364	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C365	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C366	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C367	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C368	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C369	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C370	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C371	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (VA333ES)
C373	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C374	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C375	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C375	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C376	1-119-825-41	ELECT	22uF	20%	50V (VA333ES)
C376	1-128-858-11	ELECT	22uF	20%	50V (DA4ES/DA7ES)
C377	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C378	1-128-858-11	ELECT	22uF	20%	50V (DA7ES)
C379	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C380	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C381	1-128-832-11	ELECT	220uF	20%	10V (DA4ES/DA7ES)

INPUT

Ref. No.	Part No.	Description				Remark
C382	1-137-505-11	MYLAR	220PF	5%	50V	(DA4ES/DA7ES)
C383	1-128-858-11	ELECT	22uF	20%	50V	(DA4ES/DA7ES)
C384	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	(DA4ES/DA7ES)
C385	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	(DA4ES/DA7ES)
C391	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	(DA7ES)
C392	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	(DA7ES)
C393	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	(DA7ES)
C394	1-136-169-00	MYLAR	0.22uF	5%	50V	
C395	1-136-169-00	MYLAR	0.22uF	5%	50V	
C396	1-119-805-21	ELECT	2200uF	20%	25V	(VA333ES)
C396	1-127-728-51	ELECT	2200uF	20%	25V	(DA4ES/DA7ES)
C397	1-119-805-21	ELECT	2200uF	20%	25V	(VA333ES)
C397	1-127-728-51	ELECT	2200uF	20%	25V	(DA4ES/DA7ES)
C398	1-163-038-00	CERAMIC CHIP	0.1uF		25V	(DA7ES)
C399	1-119-803-11	ELECT	470uF	20%	25V	(VA333ES)
C399	1-127-726-11	ELECT	470uF	20%	25V	(DA4ES/DA7ES)
		< CONNECTOR >				
CN301	1-784-921-11	PIN, CONNECTOR 4P				
CNP302	1-784-921-11	PIN, CONNECTOR 4P				
CNP303	1-784-923-11	PIN, CONNECTOR 7P				
CNP304	1-784-928-11	PIN, CONNECTOR 13P				
CNP305	1-779-978-11	PIN, CONNECTOR 3P				
CNP306	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH) 2P				
* CNP307	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P				
		< DIODE >				
D301	8-719-988-61	DIODE 1SS355TE-17				(DA4ES/DA7ES)
		< TERMINAL >				
* EPT301	1-537-738-21	TERMINAL, EARTH				
		< IC >				
IC301	8-759-711-85	IC NJM4580E-D				
IC302	8-759-835-78	IC TC9274N-015				
IC303	8-759-835-78	IC TC9274N-015				
IC304	8-759-582-66	IC TC9273N-013				(DA7ES)
IC305	8-759-710-59	IC NJM4580D-D				(DA4ES/DA7ES)
IC306	8-759-711-85	IC NJM4580E-D				
IC307	8-759-711-85	IC NJM4580E-D				(DA7ES)
IC308	8-759-231-59	IC TA7815S				
IC309	8-759-245-87	IC TA79015S				
IC310	8-759-231-58	IC TA7812S				
IC311	8-759-835-76	IC TC94A07P				(DA4ES/DA7ES)
IC312	8-759-231-59	IC TA7815S				
IC313	8-759-245-87	IC TA79015S				
IC314	8-759-711-85	IC NJM4580E-D				(DA4ES/DA7ES)
		< JACK >				
J301	1-778-517-11	JACK, PIN 6P (PHONO,CD/SACD,MD/DAT OUT)				
J302	1-778-517-11	JACK, PIN 6P (MD/DAT IN,TAPE)				
J303	1-784-934-11	JACK, PIN 4P (TV/SAT,DVD/LD)				
J304	1-784-934-11	JACK, PIN 4P (VIDEO 2)				
J305	1-778-517-11	JACK, PIN 6P (VIDEO 1,2ND ROOM)				(DA4ES/DA7ES)
J305	1-784-934-11	JACK, PIN 4P (VIDEO 1)				(VA333ES)
		< TRANSISTOR >				
Q301	8-729-230-49	TRANSISTOR 2SC2712-YG				(DA4ES/DA7ES)
		< RESISTOR >				
R301	1-208-453-41	RES-CHIP	4.7K	2%	1/10W	
R302	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R303	1-216-697-11	METAL CHIP	82K	0.5%	1/10W	
R304	1-216-633-11	METAL CHIP	180	0.5%	1/10W	
R305	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W	
R306	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R307	1-216-627-11	METAL CHIP	100	0.5%	1/10W	
R308	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R309	1-208-774-11	RES-CHIP	470	2%	1/10W	
R310	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R310	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R311	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R311	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R312	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R312	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R313	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R313	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R314	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R314	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R315	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R315	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R316	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R316	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R317	1-216-206-00	RES-CHIP	2.2K	2%	1/8W	(DA4ES/DA7ES)
R317	1-259-999-11	CARBON MELF	2.2K	2%	1/8W	(VA333ES)
R318	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)

Ref. No.	Part No.	Description				Remark
R318	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R319	1-216-206-00	RES-CHIP	2.2K	2%	1/8W	(DA4ES/DA7ES)
R319	1-259-999-11	CARBON MELF	2.2K	2%	1/8W	(VA333ES)
R320	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R320	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R321	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R322	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R323	1-216-627-11	METAL CHIP	100	0.5%	1/10W	(DA4ES/DA7ES)
R324	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R325	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R326	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA7ES)
R326	1-216-250-11	RES-CHIP	150K	2%	1/8W	(DA4ES)
R327	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA7ES)
R327	1-216-250-11	RES-CHIP	150K	2%	1/8W	(DA4ES)
R327	1-260-020-11	CARBON MELF	100K	2%	1/8W	(VA333ES)
R328	1-208-583-11	RES-CHIP	220K	2%	1/8W	(DA4ES/DA7ES)
R328	1-216-254-00	CARBON MELF	220K	2%	1/8W	(VA333ES)
R329	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA7ES)
R330	1-208-583-11	RES-CHIP	220K	2%	1/8W	(DA7ES)
R331	1-216-013-00	METAL CHIP	33	5%	1/10W	
R332	1-216-013-00	METAL CHIP	33	5%	1/10W	
R333	1-216-013-00	METAL CHIP	33	5%	1/10W	
R334	1-216-013-00	METAL CHIP	33	5%	1/10W	
R335	1-216-013-00	METAL CHIP	33	5%	1/10W	(DA7ES)
R336	1-216-013-00	METAL CHIP	33	5%	1/10W	(DA7ES)
R339	1-216-013-00	METAL CHIP	33	5%	1/10W	(DA4ES/DA7ES)
R340	1-216-097-11	RES-CHIP	100K	5%	1/10W	(DA4ES/DA7ES)
R341	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R345	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R351	1-208-453-41	RES-CHIP	4.7K	2%	1/10W	
R352	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R353	1-216-697-11	METAL CHIP	82K	0.5%	1/10W	
R354	1-216-633-11	METAL CHIP	180	0.5%	1/10W	
R355	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W	
R356	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R357	1-216-627-11	METAL CHIP	100	0.5%	1/10W	
R358	1-216-699-11	METAL CHIP	100K	0.5%	1/10W	
R359	1-208-774-11	RES-CHIP	470	2%	1/10W	
R360	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R360	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R361	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R361	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R362	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R362	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R363	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R363	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R364	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R364	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R365	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R365	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R366	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R366	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R367	1-216-206-00	RES-CHIP	2.2K	2%	1/8W	(DA4ES/DA7ES)
R367	1-259-999-11	CARBON MELF	2.2K	2%	1/8W	(VA333ES)
R368	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R368	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R369	1-216-206-00	RES-CHIP	2.2K	2%	1/8W	(DA4ES/DA7ES)
R369	1-259-999-11	CARBON MELF	2.2K	2%	1/8W	(VA333ES)
R370	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R370	1-259-995-11	CARBON MELF	1K	2%	1/8W	(VA333ES)
R371	1-208-782-11	RES-CHIP	1K	2%	1/8W	(DA4ES/DA7ES)
R372	1-216-214-00	RES-CHIP	4.7K	2%	1/8W	(DA4ES/DA7ES)
R373	1-216-627-11	METAL CHIP	100	0.5%	1/10W	(DA4ES/DA7ES)
R374	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R375	1-216-246-00	RES-CHIP	100K	2%	1/8W	(DA4ES/DA7ES)
R376	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA7ES)
R376	1-216-250-11	RES-CHIP	150K	2%	1/8W	(DA4ES)
R377	1-208-581-41	RES-CHIP	180K	2%	1/8W	(DA7ES)
R377	1-216-250-11	RES-CHIP	150K	2%	1/8W	(DA4ES)

Ref. No.	Part No.	Description	Remark
R377	1-260-020-11	CARBON MELF 100K 2% 1/8W	(VA333ES)
R378	1-208-583-11	RES-CHIP 220K 2% 1/8W	(DA4ES/DA7ES)
R378	1-216-254-00	CARBON MELF 220K 2% 1/8W	(VA333ES)
R379	1-208-581-41	RES-CHIP 180K 2% 1/8W	(DA7ES)
R380	1-208-583-11	RES-CHIP 220K 2% 1/8W	(DA7ES)
R389	1-216-013-00	METAL CHIP 33 5% 1/10W	(DA4ES/DA7ES)
R390	1-216-097-11	RES-CHIP 100K 5% 1/10W	(DA4ES/DA7ES)
R391	1-216-246-00	RES-CHIP 100K 2% 1/8W	(DA4ES/DA7ES)
R392	1-249-393-11	CARBON 10 5% 1/4W	(DA4ES/DA7ES)
R393	1-216-073-00	RES-CHIP 10K 5% 1/10W	(DA4ES/DA7ES)
R394	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	(DA4ES/DA7ES)
R395	1-208-782-11	RES-CHIP 1K 2% 1/8W	(DA4ES/DA7ES)
		< RELAY >	
RY301	1-755-484-11	RELAY (DA4ES/DA7ES)	

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Ref. No.	Part No.	Description	Remark
	1-685-491-11	LED BOARD **********	
		< CAPACITOR >	
C118	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
		< CONNECTOR >	
* CN101	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
		< DIODE >	
D118	8-719-084-07	LED SEL5E20C-TP15	(MULTI CHANNEL DECODING)
		< RESISTOR >	
R114	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R115	1-216-022-00	METAL CHIP 75 5% 1/10W	
R116	1-216-037-00	METAL CHIP 330 5% 1/10W	
R144	1-216-073-00	RES-CHIP 10K 5% 1/10W	

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Ref. No.	Part No.	Description	Remark
	A-4728-919-A	M-BUS BOARD, COMPLETE (DA4ES/DA7ES) *********************	
		< CAPACITOR >	
C215	1-119-823-11	ELECT 4.7uF 20% 50V	(DA4ES/DA7ES)
C216	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	(DA4ES/DA7ES)
C232	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	(DA4ES/DA7ES)
C235	1-164-690-11	CERAMIC CHIP 0.0022uF 5% 50V	(DA4ES/DA7ES)
		< CONNECTOR >	
CNS204	1-568-826-11	CONNECTOR, FFC 7P (DA4ES/DA7ES)	
		< IC >	
IC200	8-759-470-63	IC NJM2145M-TE2 (DA4ES/DA7ES)	
		< JACK >	
J203	1-563-330-11	JACK (MONITOR IN) (DA4ES/DA7ES)	
J204	1-563-330-11	JACK (TV/SAT STATUS IN) (DA4ES/DA7ES)	
J205	1-563-330-11	JACK (DVD/LD OUT) (DA4ES/DA7ES)	
J206	1-563-330-11	JACK (VIDEO 1 OUT) (DA4ES/DA7ES)	
		< TRANSISTOR >	
Q200	8-729-027-43	TRANSISTOR DTC114EKA-T146	(DA4ES/DA7ES)
Q201	8-729-027-23	TRANSISTOR DTA114EKA-T146	(DA4ES/DA7ES)
		< RESISTOR >	
R208	1-216-049-11	RES-CHIP 1K 5% 1/10W	(DA4ES/DA7ES)
R209	1-216-049-11	RES-CHIP 1K 5% 1/10W	(DA4ES/DA7ES)
R210	1-216-049-11	RES-CHIP 1K 5% 1/10W	(DA4ES/DA7ES)
R211	1-216-049-11	RES-CHIP 1K 5% 1/10W	(DA4ES/DA7ES)
R2002	1-216-073-00	RES-CHIP 10K 5% 1/10W	(DA4ES/DA7ES)

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Ref. No.	Part No.	Description	Remark
	A-4728-941-A	S-SPTM BOARD, COMPLETE (DA4ES/DA7ES)	
	A-4728-905-A	S-SPTM BOARD, COMPLETE (VA333ES) **********************	
		< CAPACITOR >	
C613	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C614	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C615	1-137-150-11	MYLAR 0.01uF 5% 50V	
C665	1-137-150-11	MYLAR 0.01uF 5% 50V	
C713	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C714	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C715	1-137-150-11	MYLAR 0.01uF 5% 50V	
C765	1-137-150-11	MYLAR 0.01uF 5% 50V	
		< DIODE >	
D608	8-719-988-61	DIODE 1SS355TE-17	
D657	8-719-988-61	DIODE 1SS355TE-17	
D707	8-719-988-61	DIODE 1SS355TE-17	
		< COIL >	
L601	1-422-009-13	COIL, AIR-CORE	

Ref. No.	Part No.	Description			Remark
L652	1-422-009-13	COIL, AIR-CORE			
L701	1-422-009-13	COIL, AIR-CORE			
L751	1-422-009-13	COIL, AIR-CORE			
		< TRANSISTOR >			
Q602	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q661	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q707	8-729-230-49	TRANSISTOR	2SC2712-YG		
		< RESISTOR >			
R616	1-249-393-11	CARBON	10	5%	1/4W
R618	1-216-073-00	RES-CHIP	10K	5%	1/10W
R619	1-249-393-11	CARBON	10	5%	1/4W
R631	1-249-389-11	CARBON	4.7	5%	1/4W
R666	1-249-393-11	CARBON	10	5%	1/4W
R670	1-249-389-11	CARBON	4.7	5%	1/4W
R682	1-216-073-00	RES-CHIP	10K	5%	1/10W
R684	1-249-393-11	CARBON	10	5%	1/4W
R716	1-249-393-11	CARBON	10	5%	1/4W
R731	1-249-389-11	CARBON	4.7	5%	1/4W
R732	1-216-073-00	RES-CHIP	10K	5%	1/10W
R734	1-249-393-11	CARBON	10	5%	1/4W
R766	1-249-393-11	CARBON	10	5%	1/4W
R781	1-249-389-11	CARBON	4.7	5%	1/4W
		< RELAY >			
RY651	1-515-920-11	RELAY (24V)			
RY652	1-515-920-11	RELAY (24V)			
RY702	1-515-920-11	RELAY (24V)			
		< TERMINAL >			
TM701	1-694-935-11	TERMINAL BOARD (8P) (SPEAKERS, SURROUND/SURR BACK) (DA4ES/DA7ES)			
TM701	1-694-935-21	TERMINAL BOARD (8P) (SPEAKERS, SURROUND/SURR BACK) (VA333ES)			

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A-4728-903-A S-VIDEO BOARD, COMPLETE (AEP)
A-4728-938-A S-VIDEO BOARD, COMPLETE (DA4ES/DA7ES)
A-4728-965-A S-VIDEO BOARD, COMPLETE (TW,KR)
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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C128	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C217	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C218	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C219	1-119-824-11	ELECT	10uF	20%	50V
C220	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C221	1-119-824-11	ELECT	10uF	20%	50V
C222	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C223	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C224	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C225	1-119-824-11	ELECT	10uF	20%	50V
C226	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C227	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C228	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C229	1-119-824-11	ELECT	10uF	20%	50V
C230	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C231	1-128-834-11	ELECT	470uF	20%	10V
C234	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C236	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C237	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C239	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C241	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C242	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C243	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C244	1-119-824-11	ELECT	10uF	20%	50V
C245	1-165-319-11	CERAMIC CHIP	0.1uF		50V (AEP)
C246	1-128-840-11	ELECT	47uF	20%	16V (AEP)
C247	1-119-822-11	ELECT	3.3uF	20%	50V (AEP)
C248	1-119-824-11	ELECT	10uF	20%	50V
C249	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C251	1-119-822-11	ELECT	3.3uF	20%	50V (AEP)
C252	1-119-824-11	ELECT	10uF	20%	50V
C254	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C262	1-119-824-11	ELECT	10uF	20%	50V
C263	1-119-824-11	ELECT	10uF	20%	50V
C264	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (EXCEPT AEP)
C265	1-163-091-00	CERAMIC CHIP	8PF		50V (EXCEPT AEP)
C266	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C267	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C268	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C269	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C270	1-128-840-11	ELECT	47uF	20%	16V
C271	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C272	1-119-824-11	ELECT	10uF	20%	50V
C274	1-119-824-11	ELECT	10uF	20%	50V
C275	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C276	1-128-840-11	ELECT	47uF	20%	16V
C279	1-126-935-11	ELECT	470uF	20%	10V (EXCEPT AEP)
C301	1-126-965-11	ELECT	22uF	20%	50V (EXCEPT AEP)
C302	1-126-964-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C303	1-126-964-11	ELECT	10uF	20%	50V (EXCEPT AEP)
C2001	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2002	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2004	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2006	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C2008	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2011	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2012	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2013	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
CNP201	1-770-594-21	CONNECTOR, BOARD TO BOARD 5P (AEP)			
CNP202	1-784-774-11	CONNECTOR, FFC 13P			
* CNP204	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			

S-VIDEO

Ref. No.	Part No.	Description	Remark
CNP220	1-766-600-21	CONNECTOR, BOARD TO BOARD 7P	(EXCEPT AEP)
CNS201	1-784-774-11	CONNECTOR, FFC 13P	
CNS203	1-568-826-11	CONNECTOR, FFC 7P (DA4ES/DA7ES)	
		< TRIMMER >	
CT203	1-141-442-91	CAP, CERAMIC TRIMMER 20PF (EXCEPT AEP)	
CT204	1-141-442-91	CAP, CERAMIC TRIMMER 20PF	
		< DIODE >	
D201	8-719-801-78	DIODE 1SS184	
D206	8-719-988-61	DIODE 1SS355TE-17	
D220	8-719-988-61	DIODE 1SS355TE-17 (EXCEPT AEP)	
		< FERRITE BEAD >	
FB202	1-469-152-11	FERRITE, EMI (SMD) (AEP)	
		< IC >	
IC202	8-759-536-24	IC NJM-2296M-TE2	
IC203	6-700-050-01	IC NJM2596M(TE2)	
IC204	8-759-822-05	IC LA7213 (AEP)	
IC205	8-759-822-05	IC LA7213 (AEP)	
IC209	6-700-367-01	IC MB90089PF-G-238-BND	
IC210	8-759-682-76	IC BA7622F-E2-A	
		< JACK >	
J207	1-563-330-11	JACK (CTRL A1 II)	
		< CONNECTOR >	
J208	1-779-801-11	CONNECTOR (ROUND TYPE) (VIDEO 1)	
J209	1-779-801-11	CONNECTOR (ROUND TYPE) (VIDEO 2)	
J210	1-779-801-11	CONNECTOR (ROUND TYPE) (TV/SAT,DVD/LD)	
		< S TERMINAL >	
J211	1-779-800-11	TERMINAL, S (MONITOR)	
		< JUMPER RESISTOR >	
JR200	1-216-296-11	SHORT CHIP 0	
JR203	1-216-296-11	SHORT CHIP 0	
JR204	1-216-296-11	SHORT CHIP 0	
JR205	1-216-296-11	SHORT CHIP 0	
JR206	1-216-296-11	SHORT CHIP 0	
JR207	1-216-296-11	SHORT CHIP 0	
JR208	1-216-296-11	SHORT CHIP 0	
JR209	1-216-296-11	SHORT CHIP 0	
JR210	1-216-296-11	SHORT CHIP 0	
JR211	1-216-296-11	SHORT CHIP 0	
JR212	1-216-296-11	SHORT CHIP 0	
		< JUMPER RESISTOR >	
JW1	1-216-295-11	SHORT CHIP 0	(VA333ES)
JW2	1-216-295-11	SHORT CHIP 0	(VA333ES)
JW3	1-216-295-11	SHORT CHIP 0	(US,CND)
		< COIL >	
L201	1-216-296-11	SHORT CHIP 0	(EXCEPT AEP)
L201	1-500-425-11	FERRITE, EMI (SMD) (AEP)	
L202	1-216-296-11	SHORT CHIP 0	(EXCEPT AEP)
L202	1-500-425-11	FERRITE, EMI (SMD) (AEP)	
L203	1-216-296-11	SHORT CHIP 0	(EXCEPT AEP)
L203	1-500-425-11	FERRITE, EMI (SMD) (AEP)	
L204	1-216-296-11	SHORT CHIP 0	(EXCEPT AEP)
L204	1-500-425-11	FERRITE, EMI (SMD) (AEP)	
L205	1-408-781-00	INDUCTOR 22uH	
		< TRANSISTOR >	
Q202	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q203	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q221	8-729-216-22	TRANSISTOR 2SA1162-G (EXCEPT AEP)	
Q222	8-729-027-43	TRANSISTOR DTC114EKA-T146 (EXCEPT AEP)	
Q223	8-729-230-49	TRANSISTOR 2SC2712-YG (EXCEPT AEP)	
Q224	8-729-216-22	TRANSISTOR 2SA1162-G (EXCEPT AEP)	
Q225	8-729-230-49	TRANSISTOR 2SC2712-YG (EXCEPT AEP)	
		< RESISTOR >	
R212	1-216-022-00	METAL CHIP 75 5% 1/10W	
R213	1-216-022-00	METAL CHIP 75 5% 1/10W	
R214	1-216-022-00	METAL CHIP 75 5% 1/10W	
R215	1-216-022-00	METAL CHIP 75 5% 1/10W	
R216	1-216-022-00	METAL CHIP 75 5% 1/10W	
R217	1-216-022-00	METAL CHIP 75 5% 1/10W	
R218	1-216-022-00	METAL CHIP 75 5% 1/10W	
R219	1-216-022-00	METAL CHIP 75 5% 1/10W	
R220	1-216-022-00	METAL CHIP 75 5% 1/10W	
R221	1-216-022-00	METAL CHIP 75 5% 1/10W	
R222	1-216-022-00	METAL CHIP 75 5% 1/10W	
R223	1-216-022-00	METAL CHIP 75 5% 1/10W	
R224	1-216-022-00	METAL CHIP 75 5% 1/10W	
R225	1-216-022-00	METAL CHIP 75 5% 1/10W	
R226	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R227	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R228	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R229	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R230	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R231	1-216-001-00	METAL CHIP 10 5% 1/10W	
R232	1-216-001-00	METAL CHIP 10 5% 1/10W	
R233	1-216-001-00	METAL CHIP 10 5% 1/10W	
R235	1-216-105-11	RES-CHIP 220K 5% 1/10W	(AEP
R236	1-216-105-11	RES-CHIP 220K 5% 1/10W	(AEP
R237	1-216-037-00	METAL CHIP 330 5% 1/10W	(AEP
R238	1-216-037-00	METAL CHIP 330 5% 1/10W	(AEP
R239	1-216-097-11	RES-CHIP 100K 5% 1/10W	
R245	1-216-063-11	RES-CHIP 3.9K 5% 1/10W	
R246	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R247	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R248	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R249	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R250	1-216-089-11	RES-CHIP 47K 5% 1/10W	
R251	1-216-035-00	METAL CHIP 270 5% 1/10W	(EXCEPT AEP
R252	1-216-065-11	RES-CHIP 4.7K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R254	1-216-097-11	RES-CHIP	100K	5%	1/10W
R255	1-216-049-11	RES-CHIP	1K	5%	1/10W
R278	1-216-022-00	METAL CHIP	75	5%	1/10W
R279	1-216-022-00	METAL CHIP	75	5%	1/10W
R290	1-216-097-11	RES-CHIP	100K	5%	1/10W
R296	1-216-295-11	SHORT CHIP	0		
R297	1-216-295-11	SHORT CHIP	0		
R298	1-216-295-11	SHORT CHIP	0		
R299	1-216-295-11	SHORT CHIP	0		
R2220	1-249-393-11	CARBON	10	5%	1/4W (TW,KR)
R2221	1-216-073-00	RES-CHIP	10K	5%	1/10W (EXCEPT AEP)
R2222	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (EXCEPT AEP)
R2224	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (EXCEPT AEP)
R2225	1-216-053-00	METAL CHIP	1.5K	5%	1/10W (EXCEPT AEP)
R2226	1-216-073-00	RES-CHIP	10K	5%	1/10W (EXCEPT AEP)
R2227	1-216-073-00	RES-CHIP	10K	5%	1/10W (EXCEPT AEP)
R2228	1-216-049-11	RES-CHIP	1K	5%	1/10W (EXCEPT AEP)
R2229	1-216-049-11	RES-CHIP	1K	5%	1/10W (EXCEPT AEP)
R2230	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT AEP)
R2231	1-216-053-00	METAL CHIP	1.5K	5%	1/10W (EXCEPT AEP)
R2232	1-216-295-11	SHORT CHIP	0		(EXCEPT AEP)
		< RELAY >			
RY220	1-515-622-11	RELAY (EXCEPT AEP)			
		< CONNECTOR >			
TP201	1-784-921-11	PIN, CONNECTOR 4P			
		< VIBRATOR >			
X202	1-781-821-21	VIBRATOR, CRYSTAL (14.3MHz) (EXCEPT AEP)			

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A-4728-955-A UP CONVERT BOARD, COMPLETE (DA4ES/DA7ES)

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< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C3100	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (DA4ES/DA7ES)
C3101	1-163-229-11	CERAMIC CHIP	12PF	5%	50V (DA4ES/DA7ES)
C3102	1-126-947-11	ELECT	47uF	20%	10V (DA4ES/DA7ES)
C3103	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)
C3104	1-126-947-11	ELECT	47uF	20%	10V (DA4ES/DA7ES)
C3105	1-104-665-11	ELECT	100uF	20%	10V (DA4ES/DA7ES)
C3106	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)
C3107	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3108	1-126-959-11	ELECT	0.47uF	20%	50V (DA4ES/DA7ES)
C3109	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3110	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3111	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3112	1-163-257-11	CERAMIC CHIP	180PF	5%	50V (DA4ES/DA7ES)
C3113	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3114	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3115	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3116	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)
C3117	1-104-665-11	ELECT	100uF	20%	10V (DA4ES/DA7ES)
C3118	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (DA4ES/DA7ES)
C3119	1-163-229-11	CERAMIC CHIP	12PF	5%	50V (DA4ES/DA7ES)
C3120	1-126-947-11	ELECT	47uF	20%	10V (DA4ES/DA7ES)
C3121	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)
C3123	1-104-665-11	ELECT	100uF	20%	10V (DA4ES/DA7ES)
C3124	1-163-235-11	CERAMIC CHIP	22PF	5%	50V (DA4ES/DA7ES)
C3125	1-163-229-11	CERAMIC CHIP	12PF	5%	50V (DA4ES/DA7ES)
C3126	1-130-495-00	MYLAR	0.1uF	5%	50V (DA4ES/DA7ES)
C3127	1-163-245-11	CERAMIC CHIP	56PF	5%	50V (DA4ES/DA7ES)
C3128	1-126-961-11	ELECT	2.2uF	20%	50V (DA4ES/DA7ES)
C3129	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3130	1-126-963-11	ELECT	4.7uF	20%	50V (DA4ES/DA7ES)
C3131	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (DA4ES/DA7ES)
C3132	1-163-131-00	CERAMIC CHIP	390PF	5%	50V (DA4ES/DA7ES)
C3133	1-163-135-00	CERAMIC CHIP	560PF	5%	50V (DA4ES/DA7ES)
C3134	1-126-960-11	ELECT	1uF	20%	50V (DA4ES/DA7ES)
C3135	1-163-231-11	CERAMIC CHIP	15PF	5%	50V (DA4ES/DA7ES)
C3136	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)
C3137	1-165-319-11	CERAMIC CHIP	0.1uF		50V (DA4ES/DA7ES)

UP CONVERT

Ref. No.	Part No.	Description	Remark
C3138	1-126-947-11	ELECT 47uF 20% 10V	(DA4ES/DA7ES)
		< CONNECTOR >	
CN3101	1-766-724-11	CONNECTOR, BOARD TO BOARD 7P	(DA4ES/DA7ES)
		< FERRITE BEAD >	
FB3101	1-469-152-11	FERRITE, EMI (SMD)	(DA4ES/DA7ES)
FB3102	1-469-152-11	FERRITE, EMI (SMD)	(DA4ES/DA7ES)
FB3103	1-469-152-11	FERRITE, EMI (SMD)	(DA4ES/DA7ES)
		< IC >	
IC3100	8-759-678-99	IC TC90A45F	(DA4ES/DA7ES)
IC3101	8-759-826-19	IC MM1093NF	(DA4ES/DA7ES)
		< JUMPER RESISTOR >	
JW3121	1-216-295-11	SHORT CHIP 0	(DA4ES/DA7ES)
JW3122	1-216-295-11	SHORT CHIP 0	(DA4ES/DA7ES)
JW3123	1-216-295-11	SHORT CHIP 0	(DA4ES/DA7ES)
		< COIL >	
L3100	1-412-064-11	INDUCTOR 100uH	(DA4ES/DA7ES)
L3101	1-412-011-31	INDUCTOR 27uH	(DA4ES/DA7ES)
L3102	1-412-064-11	INDUCTOR 100uH	(DA4ES/DA7ES)
L3103	1-412-011-31	INDUCTOR 27uH	(DA4ES/DA7ES)
L3104	1-412-011-31	INDUCTOR 27uH	(DA4ES/DA7ES)
L3105	1-414-194-11	INDUCTOR 33uH	(DA4ES/DA7ES)
		< TRANSISTOR >	
Q3100	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3101	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3102	8-729-216-22	TRANSISTOR 2SA1162-G	(DA4ES/DA7ES)
Q3103	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3104	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3105	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3106	8-729-216-22	TRANSISTOR 2SA1162-G	(DA4ES/DA7ES)
Q3107	8-729-216-22	TRANSISTOR 2SA1162-G	(DA4ES/DA7ES)
Q3108	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3109	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3110	8-729-230-49	TRANSISTOR 2SC2712-YG	(DA4ES/DA7ES)
Q3111	8-729-216-22	TRANSISTOR 2SA1162-G	(DA4ES/DA7ES)
Q3112	8-729-216-22	TRANSISTOR 2SA1162-G	(DA4ES/DA7ES)
		< RESISTOR >	
R3101	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3102	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	(DA4ES/DA7ES)
R3103	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3104	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3105	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3106	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)

Ref. No.	Part No.	Description	Remark
R3107	1-216-075-00	METAL CHIP 12K 5% 1/10W	(DA4ES/DA7ES)
R3108	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3110	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3111	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3112	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3113	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3114	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	(DA4ES/DA7ES)
R3115	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3116	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3117	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3118	1-216-025-11	RES-CHIP 100 5% 1/10W	(DA4ES/DA7ES)
R3120	1-216-075-00	METAL CHIP 12K 5% 1/10W	(DA4ES/DA7ES)
R3121	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3122	1-260-354-71	CARBON 150 5% 1/2W	(DA4ES/DA7ES)
R3123	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3124	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3125	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3126	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	(DA4ES/DA7ES)
R3127	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3128	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(DA4ES/DA7ES)
R3129	1-216-047-11	RES-CHIP 820 5% 1/10W	(DA4ES/DA7ES)
R3130	1-216-025-11	RES-CHIP 100 5% 1/10W	(DA4ES/DA7ES)
R3131	1-216-039-00	METAL CHIP 390 5% 1/10W	(DA4ES/DA7ES)
R3132	1-216-075-00	METAL CHIP 12K 5% 1/10W	(DA4ES/DA7ES)
R3133	1-216-043-11	RES-CHIP 560 5% 1/10W	(DA4ES/DA7ES)
R3134	1-260-354-71	CARBON 150 5% 1/2W	(DA4ES/DA7ES)
R3136	1-216-073-00	RES-CHIP 10K 5% 1/10W	(DA4ES/DA7ES)
R3137	1-216-073-00	RES-CHIP 10K 5% 1/10W	(DA4ES/DA7ES)
R3138	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	(DA4ES/DA7ES)
R3139	1-216-077-11	RES-CHIP 15K 5% 1/10W	(DA4ES/DA7ES)
R3140	1-216-121-11	RES-CHIP 1M 5% 1/10W	(DA4ES/DA7ES)

Ref. No.	Part No.	Description				Remark
R3141	1-216-039-00	METAL CHIP	390	5%	1/10W	(DA4ES/DA7ES)
R3142	1-216-022-00	METAL CHIP	75	5%	1/10W	(DA4ES/DA7ES)
R3143	1-216-022-00	METAL CHIP	75	5%	1/10W	(DA4ES/DA7ES)
R3144	1-216-049-11	RES-CHIP	1K	5%	1/10W	(DA4ES/DA7ES)
R3145	1-216-045-00	METAL CHIP	680	5%	1/10W	(DA4ES/DA7ES)
R3146	1-216-035-00	METAL CHIP	270	5%	1/10W	(DA4ES/DA7ES)
		< VIBRATOR >				
X3100	1-781-342-21	OSCILLATOR, CRYSTAL (3.5795MHz)				(DA4ES/DA7ES)

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Ref. No.	Part No.	Description				Remark
	1-685-490-11	VIDEO3 BOARD				
		*************				
		< CAPACITOR >				
C113	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C114	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C115	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C117	1-165-319-11	CERAMIC CHIP	0.1uF		50V	
		< CONNECTOR >				
* CNP107	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P				
		< JACK >				
J102	1-764-190-21	JACK, PIN 3P (VIDEO 3 INPUT)				
		< JUMPER RESISTOR >				
JR101	1-216-295-11	SHORT CHIP	0			
		< RESISTOR >				
R168	1-216-022-00	METAL CHIP	75	5%	1/10W	
R169	1-216-022-00	METAL CHIP	75	5%	1/10W	
R170	1-216-022-00	METAL CHIP	75	5%	1/10W	
R171	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R172	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R173	1-216-097-11	RES-CHIP	100K	5%	1/10W	
R174	1-216-097-11	RES-CHIP	100K	5%	1/10W	

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Ref. No.	Part No.	Description	Remark
	1-685-489-11	VOLUME BOARD	
		*************	
		< CONNECTOR >	
CNP105	1-779-978-11	PIN, CONNECTOR 3P	
		< ROTARY ENCODER >	
RV103	1-477-382-11	ENCODER, ROTARY (MASTER VOLUME)	

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Ref. No.	Part No.	Description	Remark
	1-685-494-11	4/8 BOARD	
		*********	
		< CONNECTOR >	
* CNP903	1-564-607-11	PIN, CONNECTOR (3.96mm PITCH) 6P	
		< SWITCH >	
S902	1-771-876-11	SWITCH, POWER (IMPEDANCE SELECTOR)	

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		***************	
115	1-773-162-11	WIRE (FLAT TYPE) (21 CORE)	
116	1-773-021-11	WIRE (FLAT TYPE) (15 CORE)	
157	1-773-021-11	WIRE (FLAT TYPE) (15 CORE)	
⚠160	1-769-079-22	CORD, POWER (KR)	
162	1-823-582-11	WIRE (FLAT TYPE) (15 CORE)	
164	1-769-971-11	WIRE (FLAT TYPE) (13 CORE)	
166	1-769-969-11	WIRE (FLAT TYPE) (13 CORE)	
167	1-769-975-11	WIRE (FLAT TYPE) (13 CORE)	
169	1-769-879-11	WIRE (FLAT TYPE) (7 CORE)	(DA4ES/DA7ES)
201	1-769-971-11	WIRE (FLAT TYPE) (13 CORE)	
256	1-469-241-11	CORE, FERRITE (RFC-8 BK)	
⚠F801	1-533-312-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(10A/125V)
⚠F802	1-533-312-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(10A/125V)
⚠F805	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V)	(VA333ES)
⚠F805	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(4A/125V) (DA4ES/DA7ES)
⚠F806	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V)	(VA333ES)
⚠F806	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(4A/125V) (DA4ES/DA7ES)
⚠F901	1-532-325-00	FUSE, TIME-LAG (T6.3AL/250V)	(AEP,KR)
⚠F901	1-576-379-11	FUSE, GLASS CYLINDRICAL (DIA.5)	(15A/250V) (US,CND,TW)
⚠F902	1-532-464-51	FUSE, TIME-LAG (T2.5AL/250V)	(AEP)
IC502	8-749-014-72	IC SAP15N	
IC503	8-749-014-73	IC SAP15P	
IC552	8-749-014-72	IC SAP15N	
IC553	8-749-014-73	IC SAP15P	
IC602	8-749-014-72	IC SAP15N	
IC603	8-749-014-73	IC SAP15P	
IC652	8-749-014-72	IC SAP15N	
IC653	8-749-014-73	IC SAP15P	
IC654	8-749-014-72	IC SAP15N	
IC655	8-749-014-73	IC SAP15P	
IC702	8-749-014-72	IC SAP15N	
IC703	8-749-014-73	IC SAP15P	
IC752	8-749-014-72	IC SAP15N	
IC753	8-749-014-73	IC SAP15P	
⚠T901	1-437-270-11	TRANSFORMER, POWER	(US)
⚠T901	1-437-271-11	TRANSFORMER, POWER	(DA4ES:CND)
⚠T901	1-437-272-11	TRANSFORMER, POWER	(TW)
⚠T901	1-437-274-11	TRANSFORMER, POWER	(AEP,KR)
⚠T901	1-437-872-11	TRANSFORMER, POWER	(DA7ES:CND)
TU301	1-693-539-21	TUNER PACK (FM/AM)	(DA4ES/DA7ES)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
TU301	1-693-540-21	TUNER PACK (FM/AM) (VA333ES)	

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ACCESSORIES

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Ref. No.	Part No.	Description	Remark
⚠	1-476-351-12	ADAPTOR, AC (AC-96NP) (for RM-TP1) (DA7ES)	
	1-476-644-21	COMMANDER, STANDARD (RM-US105A) (DA7ES)	
	1-477-333-11	REMOTE COMMANDER (RM-LP211) (DA4ES/VA333ES)	
	1-477-431-11	COMMANDER, STANDARD (RM-TP1) (DA7ES)	
	1-501-374-11	ANTENNA, LOOP (AM)	
	1-501-594-13	ANTENNA (FM) (AEP,TW)	
⚠	1-551-631-22	CORD, POWER (AEP)	
⚠	1-757-130-11	CORD, POWER (TW)	
	1-777-172-11	CORD, CONNECTION (CONTROL S) (DA4ES/DA7ES)	
	1-777-560-11	CORD, CONNECTION (AUDIO/VIDEO/CONTROL S) (DA4ES/DA7ES)	
	1-793-184-21	CONNECTOR (F TYPE ADAPTOR) (FM ANTENNA) (DA4ES/DA7ES/VA333ES:KR)	
	1-816-267-11	CHARGER, BATTERY (for RM-TP1) (DA7ES)	
⚠	1-823-512-11	CORD, POWER (DA4ES/DA7ES)	
	3-179-022-31	COVER, DUSTER	
	4-228-696-01	COVER, BATTERY (for RM-US105A) (DA7ES)	
	4-239-573-01	COVER, BATTERY (for RM-TP1) (DA7ES)	
	4-241-478-01	COVER, BATTERY (for RM-LP211) (DA4ES/VA333ES)	
	4-241-666-11	MANUAL, INSTRUCTION (ENGLISH) (DA4ES/DA7ES)	
	4-241-666-21	MANUAL, INSTRUCTION (FRENCH) (CND)	
	4-241-667-11	MANUAL, INSTRUCTION (ENGLISH) (AEP,TW)	
	4-241-667-21	MANUAL, INSTRUCTION (FRENCH,SPANISH, GERMAN,DUTCH) (AEP)	
	4-241-667-31	MANUAL, INSTRUCTION (SWEDISH,ITALIAN, PORTUGUESE) (AEP)	
	4-241-667-41	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (TW)	
	4-241-667-51	MANUAL, INSTRUCTION (KOREAN) (KR)	
	4-241-668-11	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	
	4-241-668-21	MANUAL, INSTRUCTION (DANISH,FINNISH) (AEP)	
	4-241-668-31	MANUAL, INSTRUCTION (RUSSIAN) (AEP)	
	4-241-675-11	MANUAL, INSTRUCTION (ENGLISH) (DA4ES/ VA333ES:AEP,TW)	
	4-241-675-21	MANUAL, INSTRUCTION (FRENCH) (DA4ES:CND/VA333ES:AEP)	
	4-241-675-31	MANUAL, INSTRUCTION (SPANISH) (AEP)	
	4-241-675-41	MANUAL, INSTRUCTION (GERMAN,DUTCH, SWEDISH) (AEP)	
	4-241-675-51	MANUAL, INSTRUCTION (ITALIAN, PORTUGUESE) (AEP)	
	4-241-675-61	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (TW)	
	4-241-675-71	MANUAL, INSTRUCTION (KOREAN) (KR)	
	4-241-676-11	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	
	4-241-676-21	MANUAL, INSTRUCTION (DANISH,FINNISH) (AEP)	
	4-241-676-31	MANUAL, INSTRUCTION (RUSSIAN) (AEP)	
	4-241-679-11	MANUAL, INSTRUCTION (GREEK) (AEP)	
	4-241-679-21	MANUAL, INSTRUCTION (HUNGARIAN,CZECH) (AEP)	
	4-241-679-31	MANUAL, INSTRUCTION (TURKISH) (AEP)	
	4-241-679-41	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	
	4-241-687-11	MANUAL, INSTRUCTION (GREEK) (AEP)	
	4-241-687-21	MANUAL, INSTRUCTION (HUNGARIAN,CZECH) (AEP)	
	4-241-687-31	MANUAL, INSTRUCTION (TURKISH) (AEP)	
	4-241-687-41	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.